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**ISABELLE DE CHARRIÈRE (1740-1805): A PHILOSOPHICAL
'IMPROMPTU' IN THE AGE OF REASON**

by

GINA FISCH-FREEDMAN

A dissertation submitted to the Graduate Faculty in Comparative Literature in
partial fulfillment of the requirements for the degree of Doctor of Philosophy,
The City University of New York

1998

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Abstract

ISABELLE DE CHARRIÈRE (1740-1805): A PHILOSOPHICAL 'IMPROMPTU' IN THE AGE OF REASON

by

GINA FISCH-FREEDMAN

Advisors: Professor Nancy K. Miller
Professor David S. Ferris

This dissertation examines the work of Isabelle de Charrière, a cosmopolitan writer of the 18th century, who positioned herself as a translator between fiction and philosophy. Each chapter is devoted to a specific historical, critical and philosophical problematic as developed both in Charrière's fiction and her correspondence.

The first chapter focuses on Charrière's use of the epistolary genre. The mixture of disparate elements characteristic of the epistolary novels (multiplicity of narrators, interweaving of reading and writing, shifts in narrative continuity and authority, etc.) allows Charrière to question exemplary fictions as well as examples in fiction. The textual part examines the thorny question of education and virtue in Lettres de Lausanne.

The second chapter contrasts Charrière's reaction to Rousseau with those of her contemporaries for whom Rousseau's writings contained dominant examples not only for political theory but also for morals and fiction. Charrière invites the reader to concentrate on Rousseau's style and creates a fictional example of her own which will question ideological and thematic exemplarity in Rousseau's works. The second half of the chapter examines Charrière's critical transformation of

La Nouvelle Héloïse in her Lettres neuchâtelaises.

The third chapter studies the complexities of representing the "devoir," the key-concept in Kant's moral philosophy. In Trois Femmes, Charrière fictionalizes Kant's categorical imperative and aspires to arrive at the philosophical as well as practical criticism of his moral system. In her narrative, Charrière shifts emphasis from Kant's systematic articulation of the a priori moral principle to the question of its practicability in the world of action. By becoming the "free" space where the a priori can be figured, literature in Charrière contributes to the philosophical education of mankind.

The fourth chapter examines Charrière's persistent preoccupation with the political event she saw taking place during her lifetime -- the French Revolution. More than a historical background for her stories, the French Revolution for Charrière becomes an opportunity to assess the role played by fictionality in political discourse eager to establish the Revolution as its proper origin. Charrière once again warns her readers against following in Don Quixote's footsteps and highlights the rhetorical and normative aspects of any historical discourse.

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I would like to thank Nancy K. Miller for her discriminating patience, trenchant criticisms and scholarly expertise. The discipline of her supervision was a crucial ingredient in my work throughout these four years.

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Finally, I thank the Graduate Faculty of Comparative Literature and French, in particular Professor Eve Sourian in whose class I read *Charrière* for the first time, still not knowing that she was to become my destiny (and ordeal) for years to come.

Many friends contributed to this dissertation by sharing their thoughts and donating their time. In no particular order, I thank, Catherine Liu, Andrew Long, Isaac Gewirtz, Jarrod Hayes, Karen Blood, Carina Yervasi, Oleg Krochik and Fazia Aitel. The support of my husband, Jeffrey Freedman, during the last six months was a necessary condition for the rapid (and somewhat convulsive) conclusion of this project. All the mistakes contained therein are mine only.

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Introduction: Isabelle de Charrière (1740-1805): A Philosophical 'Impromptu' in

the Age of Reason

Brillante, cultivée, intelligente ardente, Mlle de Tuele étonnait L'Europe ... [e]nfermée à Colombier entre ce mari honnête et morne, un beau-père sénile, deux belles soeurs sans charme. Mme de Charrière commença à s'ennuyer; la société provinciale de Neuchâtel lui déplaisait par son esprit étroit; elle tuait ses journées en lavant le linge de la maison en en jouant le soir à la Comète.... Prenant l'ennui pour muse, elle écrivit quatre romans sur les moeurs de Neuchâtel.

Simone de Beauvoir¹

This dissertation explores the work of Isabelle de Charrière, a cosmopolitan writer of the 18th century. Isabella-Agneta-Elisabeth van Tuyll van Seroosken van Zuylen, dame de Charrière, also known as Belle Van Zuylen, was born in 1740 in Utrecht, Holland. Bilingual in French and Dutch, she chose to write mainly in French and sometimes in German. She also learned Italian, English, German, translated works from these languages into French and studied mathematics, physics and philosophy.²

¹Simone de Beauvoir, Le Deuxième Sexe, Vol. II (Paris: Gallimard, 1968), p.121-123.

²For a detailed biography of Isabelle de Charrière, consult Isabelle Vissière, Isabelle de Charrière. Une aristocrate révolutionnaire. Ecrits, 1788-1794. (Paris: Des Femmes, 1988); Geoffrey Scott, Le portrait de Zélide. Trans. Philippe Neel (Paris: Gallimard, 1932); Winiker Rolf, Madame De Charrière. Essai d'un itinéraire spirituel. (Lausanne: L'Âge d'homme, 1971); Sainte-Beuve, "Madame de Charrière", in Portraits de Femmes. Oeuvres, II, (Bibliothèque de la Pléiade), 1353-1392; Mona Ozouf, Les mots des Femmes. (Paris: Fayard, 1995), 55-83.

In 1771 she married a Swiss nobleman Charles-Emmanuel de Charrière, a tutor of her brothers. Apart from a short stay in Paris and London before the French Revolution. Isabelle de Charrière lived until her death in 1804 in Colombier, a Swiss territory in the vicinity of Neuchâtel.

She began her literary career at the age of twenty-two when in 1762 she published Le Noble, a moral tale denouncing abuses of aristocratic privilege. But it is only in 1784, that her signature reappears when La famille d'Ornac, a comic opera, lyrics and music composed by her. L'Incognito, and three successful novels, Lettres de Mistress Henley, Lettres Neuchâteloises, and Lettres de Lausanne appeared under the name of Charrière (she published her earlier writings as Zuylen.)

In 1786-1787, Charrière goes to Paris where she moves in the fashionable circles of Madame de Saurin, the Thélusson banker, and above all the "salon" of the Suard, where she met l'abbé Raynal, the author of Qu'est-ce que le Tiers-Etat, the Encyclopedist abbé Morellet, the mathematician Bailly, future mayor of Paris, La Fayette and Condorcet. She also meets Benjamin Constant with whom she will have an extended correspondence. In Paris, Charrière takes classes in Fine Arts and acquires training in painting, music and drawing. After 1789, she comes back to Colombier, where the political events of the French Revolution induce her to write Observations et conjonctures politiques, a work containing political reflections on the present day political situation. Each "feuille" (that is how Charrière called the chapters of her work) is devoted to a different political subject ("Sur l'Edit concernant les Protestants," "sur l'irresponsabilité du Monarque," "sur l'irresponsabilité des Lettres de cachet," and

so on). The line of reasoning underlying Observations will take a more political direction in her Lettres d'un évêque français à la nation in which Charrière gets engaged in the discussions on the inequality of wealth, the excessive richness of the Catholic Church, the rise of the third Estate to power. Her narrator ("évêque" as she calls him) is also preoccupied with the question of religious liberty and condemns death penalty. The very same questions constituted the agenda of the General Estates ("États-Généraux") held in Versailles during the spring of 1789. The responses to her Lettres were not long to appear. Chambrier D'Oleyre, a friend of the Charrières, diplomat and ambassador of the kingdom of Prussia in the court of Piémont, acknowledges the exceptional accuracy of Charrière's judgement:

L'ouvrage qu'elle m'a dit avoir le plus travaillé, celui dont elle est le plus satisfaite, c'est la sixième lettre d'un évêque. La matière est importante, il s'agit de la réforme du Code criminel et de l'abolition de la peine de mort. Mme de Charrière traite de cette matière avec plus de profondeur qu'on ne peut en attribuer à une femme occupée d'ouvrages légers et sans suite.³

Besides her political writings, in the years of the French revolution Charrière completed a lyrical tragedy Les Phéniciennes and two comedies Attendez, revenez and La Femme sensible ou Comment la nommera-t-on?. In 1790, Charrière wrote a manifesto in the name of Thérèse Levasseur, Rousseau's companion accused of provoking the great writer's suicide by her immoral conduct. In addition to the above manifesto, she composed three operas Polyphème le Cyclope, Zadig, and Les Femmes, the last being a brilliant satire on the position of women in society.

The 10th of August of 1792 announced the end of the French monarchy. The

³Cited in Isabelle Vissière, p.66.

palace of the Tuileries was stormed by the people of Paris, the King was taken prisoner and put on trial for crimes against “le peuple.” This event ushered in the radicalization of the French Revolution and resulted in a wave of French emigration. Living in Switzerland, Charrière will provide shelter to many of these emigres. Prompted by this exodus, Charrière begins a reflection on exile, nation, borders, national identity, social classes and other political concepts such as freedom, republic and monarchy. In this moment of social unrest and political incertitude, Charrière composes novels, drama, opera and poetry that should have assured her a place in Western literary canon. As Isabelle Vissière says as much: “C’est la Révolution qui a révélé à Belle. . . . sa vraie nature d’écrivain.”⁴ Such works as Lettres trouvées dans la neige, Lettres trouvées dans les porte-feuilles d’émigrés, l’émigré, l’inconsolable, Elise ou l’université, les modernes caquets, la Parfaite Liberté ou les vous et les toi were published in rapid succession during this highly productive era in Charrière’s creative life.

During the same period and with the help of her emigre friends and Benjamin Constant in particular, Charrière establishes a network of correspondents and friends in Germany and Switzerland who will introduce her to contemporary German literature and philosophy. Like their French counterparts, the German philosophers emphasized the authority of reason, but if philosophers like Kant and Fichte believed in the almighty power of Reason, some others like Hamman, Herder and Georg Foster (ex-husband of Thérèse Huber, a friend of Isabelle de Charrière) doubted that power of reason suffices

⁴Isabelle Vissière, “Madame de Charrière et la Révolution française.” Online. Internet. Available <http://www.etcl.nl/charrière/articles/vissière.htm>.

to conduct a critical examination of social reality as well as of itself. Unlike the French philosophes who believed that the authority of reason will be able to take the place of the Church or tradition, the Germans identified reason with a critical power which turns reason onto itself. In 1787, Kant published Kritik of der Reinen Vernunft in which he sought to establish the limits to the power of reason. Strict observance of these limits was meant to prevent any rational being from ever falling back into the trap of religious dogmatism or empiricist scepticism. In its critical employment, Kant's reason realizes its own substance as it abstracts itself from language, culture and experience, and appeals to rational nature a priori, i.e., in the unconditional manner.

But for Charrière philosophy has to be written. While conducting a critique, she suspected, one is also obliged to take into account the problem of writing. And the writing of fiction becomes for her a medium of reflection on the issues surrounding the inscription of philosophical, political and moral questions. Literature becomes critique when Charrière examines the concept of the categorical imperative in Trois Femmes, incest and the moral system in Honorine d'Userche, education in De L'esprit et des rois, illiteracy in Sainte-Anne, and political power in Asychis ou le Prince d'Egypte.

Even in the times as exuberant and varied as those of the French Revolution, the voice of Charrière remains unique. First of all, her life situation in Switzerland allowed her to maintain a correspondence with intellectuals across the borders of France and Germany, and assimilate and rework ideas emanating from different historical lineages. Second, her work resists classification under the traditional rubrics of the Enlightenment and Romanticism. On the one hand, she adhered to the normative ideals

of the Enlightenment, but, on the other, she criticized the rationalistic optimism of the Philosophes and anticipated the critical problematic that became preeminent in the German and French Romantic movement. Finally, Charrière's choice of expression -- she wrote novels to debate of philosophical and political issues -- sets her apart from both philosophers and writers of her time.

Among the philosophers whose works influenced Charrière, Jean-Jacques Rousseau and Immanuel Kant figure most prominently. In addition to personal interest, this choice of reading also meant to educate the public and allow her readers to familiarize themselves with the new orientations of philosophy and especially of moral philosophy.

Despite many remarkable qualities of her writing, Charrière's posthumous career was decidedly lackluster. For a long period, the philosophical and literary importance of her works remained unknown to the public notwithstanding the efforts of Philippe Godet, the author of Madame de Charrière et ses amis and Basil Muntéanu, the author of Episodes Kantians en Suisse et en France sous le Directoire.⁵ In 1989, thanks to the European commemoration of the French Revolution, Charrière's name resurfaced, brought to light by a team of Dutch and Swiss publishers who decided to gather and publish her complete works. This publication initiated a larger reading of her works

⁵Godet, Philippe, Madame de Charrière et ses amis d'après de nombreux documents inédits (1740-1805) (Genève: Jullien, 1906). Muntéanu, Basil, "Episodes Kantians en Suisse et en France sous le Directoire," Revue de Littérature comparée, 4^e année, no. 3 (Juillet-Sept. 1935), p. 387-454.

which began to present Charrière as an important figure of her time.⁶ However, most of

For example of recent readings of Charrière, see Jenene Allison, Revealing Difference: The Fictions of Isabelle de Charrière (Newark, Del.: U of Delaware P; London: Associated UP, 1995). Mauro Barbéris and Giuseppe Sebaste, "Comment devenir ce que l'on est: Benjamin Constant, Madame de Charrière et la Révolution," in: Benjamin Constant et la Révolution française, 1789-1799, publié sous la direction de Dominique Verrey et d'Anne-Lise Delacretaz (Genève: Librairie Droz, 1989) 39-60. Colloque de Neuchâtel. Une Européenne: Isabelle de Charrière en son siècle, 11-13 novembre 1993. (Hauterive-Neuchâtel: Gilles Attinger, 1994). Carla Hesse, "Kant, Foucault, and Three Women" in: Foucault and the Writing of History, ed. Jan Goldstein. (Cambridge, Massachusetts and Oxford, U.K.: Basil Blackwell, 1994). Katherine Ann Jensen, Writing Love. Letters, Women and the Novel in France, 1605-1776, (Carbondale and Edwardsville: Southern Illinois University Press, 1995). Susan Lanser, Fictions of Authority: Women Writers and Narrative Voice, (Ithaca, New York: Cornell University Press, 1992). Elizabeth MacArthur, Extravagant Narratives. Closure and Dynamics in the Epistolary Form, (Princeton: Princeton University Press, 1990). Roland Mortier, "Benjamin Constant devant la Révolution française." et Isabelle Vissière "Duo épistolaire ou duel idéologique?" Benjamin Constant et la Révolution française, publié sous la direction de Dominique Verrey et d'Anne-Lise Delacretaz, (Genève: Librairie Droz, 1989). Mona Ozouf, Les mots des Femmes, (Paris: Fayard, 1995). Colette Piau-Gillot, "Préface" in: Isabelle de Charrière, Lettres trouvées dans des portefeuilles d'émigré, (Paris: Côté-femmes, 1993), 7-20. Joan Hinde Stewart, Gynographs: French Novels by Women of the Late Eighteenth Century, (Lincoln: University of Nebraska Press, 1993). Isabelle Vissière et Jean Louis Vissière, Isabelle de Charrière. Une liaison dangereuse. Correspondance avec Constant d'Hermenches, 1760-1776, (Paris: Éditions de la Différence, 1991). Paul Delbouille, "Benjamin Constant entre deux règnes." Online. Internet. Available <http://www.etcl.nl/Charrière/articles/delbouille.htm>; Bernard Bray, "Belle épistolière, ou 'La Sévigné de notre siècle,'" Online. Internet. Available <http://www.etcl.nl/Charrière/articles/bray.htm>; Alex Deguise, "Madame de Charrière et la condition féminine." Online. Internet. Available <http://www.etcl.nl/Charrière/articles/deguise.htm>; Pierre H Dubois, "Entre Charybde et Scylla: Isabelle de Charrière et sa morale." Online. Internet. Available <http://www.etcl.nl/Charrière/articles/pdubois.htm>; Michel Gilot, "Isabelle de Charrière. L'écriture ou la vie." Online. Internet. Available <http://www.etcl.nl/Charrière/articles/gilot.htm>; Raymond Trousson, "Isabelle de Charrière et Jean-Jacques Rousseau." Online. Internet. Available <http://www.etcl.nl/Charrière/articles/trousson87.htm>; Raymond Trousson, "Présence de Voltaire dans l'oeuvre d' Isabelle de Charrière." Online. Internet. Available <http://www.etcl.nl/Charrière/articles/trousson95.htm>; Roland Mortier,

the recent criticism on Charrière followed Sainte-Beuve's interpretative paradigm that dates back to middle of the XIXth century: "Madame Sand peut faire encore bien du chemin avant d'arriver en fait d'idées sociales, là où Mme de Charrière est allée droit, sans phrases et du premier coup."⁷ Charrière's particular talent, claimed Sainte-Beuve, was her ability to represent social ideas. More than a century later, Jenene Allison, an American critic, argued in Revealing Differences that Charrière is one "of the most astute reader of women's status in the eighteenth century."⁸ Closer to home, Mona Ozouf struck a similar note in Les Mots des Femmes: "Son univers romanesque est celui d'une connivence immédiate entre des femmes adroites et fines" (75). These judgements praising the fidelity of Charrière's writing are not surprising since she, like most of her contemporaries, was at pains to accommodate the esthetic exigency of the time, namely, the demand for perfect illusion and plausibility, an exigency that, Charrière writes, is the condition for her writing:

J'avais bien une continuation des Lettres Neuchâteloises dans la tête, & elles auraient été moins neuchâteloises, mais après que j'ai été tout à fait reconnue j'ai

"Un roman inachevé sur la Révolution vécue: Henriette et Richard par madame de Charrière." Online. Internet. Available <http://www.etcl.nl/Charrière/articles/mortier.htm>; Isabelle Vissière, "Madame de Charrière et la Révolution française." Online. Internet. Available <http://www.etcl.nl/charriere/articles/vissiere.htm>; Dennis M. Wood, "Isabelle de Charrière, Benjamin Constant and the Novel." Online. Internet. Available. <http://www.etcl.nl/Charrière/articles/wood.htm>.

⁷ Cited in Isabelle Vissière. Isabelle de Charrière. Une aristocrate révolutionnaire. Ecrits. (Paris: Des Femmes, 1988), p. 636.

⁸ Jenene Allison. Revealing Difference. The Fictions of Isabelle de Charrière. (Newark: University of Delaware press, 1995), p.IX.

perdu courage. L'air de grande vérité qui a vraiment fait un peu illusion ici ne pourrait plus produire son effet. et c'est cet effet que je voulais produire. On ne verrait plus que moi au lieu d'un honnête & aimable jeune commis. &&.⁹

Indeed, throughout her literary career, Charrière strove to give the illusion of a social reality in her novel. When she was discovered as the author of the novel Lettres neuchâtelaises, she decided not to write a sequel because she was persuaded that if she does, the readers would posit a judgment on her, rather than on her text. Thus, Charrière was willing to sacrifice the benefits of authorship for the sake of the text, and sought to continually provoke the readers into confrontation with the ideological and rhetorical structure of her fiction. Constantly reworking her own fictions, trying to find new modes of expression and composition, by 1784 Charrière moved beyond storytelling to reflection upon history, fiction and the very means by which fictional, historical and social events are recounted. Like Diderot or Sterne, Charrière had questioned the ways in which writing reflects, betrays and constitutes the relation between self, society and experience. In 1796, the Journal encyclopédique ou universel published a review of Charrière's most famous epistolary novel Lettres de Lausanne that says:

Elles nous paraissent avoir ce ton de vérité et de naturel qui éloignent l'idée qu'elles seraient factices ou supposées, et dans le cas où, contre notre opinion, elles le seraient, l'auteur n'en mériterait que plus d'éloges pour avoir conservé à son recueil l'air de vraisemblance qu'il est si difficile de soutenir dans ces

⁹Isabelle de Charrière, Belle von Zuylen, Oeuvres complètes. Eds. Jean-Daniel Candaux, C.P. Courtney, Pierre H. Dubois, Simone Dubois-De Bruyn, Patrice Thompson, Jeroom Vercruyssen et Dennis M. Wood. Vol 2. (Amsterdam: G.A. Van Oorschot; Genève: Éditions Slatkine, 1989), p. 454. All subsequent quotes from Charrière's correspondence and literary works come from this edition and will be cited in the text.

espèces de mensonges littéraires.¹⁰

The review above as well as Charrière's own comments plunge the reader into the wider contemporary debate over the value of truth and verisimilitude in literary narratives.

In the course of these debates, the classical position (which insisted on the evaluation of a work of art in terms of its imitation of a set of rules held as true such as bienséance or the rules of the unities) was shifting to an evaluation of the work of art in terms of its correspondence to a "true" enunciation of the writer. In this newly emerging poetics, truth was understood as a "natural" enunciation and was to be found "within" writing itself. Jean Starobinski put it best: "We have moved from the realm of (historical) truth to that of authenticity (the authenticity of discourse)."¹¹ The process of communication, therefore, took precedence over conformity to the doxa, as famously illustrated by Rousseau's Confessions. The literature of the time started to compete for expressing the authenticity of a self rather than of the ideal model.

Affirming the unique value of personal experience and presenting this experience as a matter of universal judgment became the overriding literary interest. Under these circumstances, the narrative authenticity became synonymous with sincerity without distance. In the age of Rousseau, rhetorical persuasion was no longer based on the rules of taste but on how authentic and "true" the language presenting the experience

¹⁰ Cited in Jan Herman, Le Mensonge romanesque, (Amsterdam: Rodopi, 1989) p. 219.

¹¹ Jean Starobinski, Jean-Jacques Rousseau: Transparency and Obstruction, transl. Arthur Goldhammer (Chicago and London: The University of Chicago Press 1988) p. 198.

sounds.¹² This shift in poetics found expression in the growing popularity of such narrative forms as epistolary and memoir novel. The Voltairian “conte philosophique” (Candide, Zadig) or epistolary travelogues such as Montesquieu’s Lettres persannes which called attention to their artificial, literary nature by the use of grotesque or defamiliarization yielded to epistolary novels that promoted their fidelity to the fact such as Rousseau’s La Nouvelle Héloïse and Laclos’s Les Liaisons dangereuses. Sensibilité displaced bienséance as a governing literary value, and a new language had to be found in order to propel the emerging model of literariness. Regarding this matter, Angus Martin wrote:

la doctrine de la sensibilité telle qu'elle a évolué dans la seconde moitié du siècle avait remplacé la notion de perfectibilité de l'homme (chère aux premiers philosophes) par celle de sa perfection naturelle. Rousseau, en écartant pour ses contemporains la notion du péché originel, fournit ainsi une dernière pièce à l'édifice idéologique. Au lieu de chercher par la raison à faire avancer l'humanité vers un avenir plus heureux, l'homme sensible s'en remettra à ses intuitions, grâce auxquelles il retrouvera en lui-même l'état de grâce de ses ancêtres les plus

—In Le Mensonge romanesque, Jan Herman describes how the concept of verisimilitude changed from the 17th century to the 18th century. He shows that in the 17th century, what was considered as “natural” was the normative discourse, the rules, the “classical doxa.” Literature imits the “real” as long as it conforms to a discourse in which set of rules are established for its enunciation. What is true, is an “external ideal discourse” that the literary text aspires to reproduce. However, in 18th century the relationship is inverted, and concepts of verisimilitude and truth are radically rethought and translated. The literary narrative is understood as copy or a translation of an authentic and original text. The truth of the text is contained becomes the ability of the text to translate “authentic” events and/or feelings. For more detailed discussions on the concepts of truth and verisimilitude, see Gérard Genette, “Vraisemblance et motivation,” in: Figures II, (Paris: Seuil, 1969) pp. 71-99, and Julia Kristeva, “La Productivité dite texte,” in: Séméiotokè. Recherches pour une sémanalyse (Paris: Seuil, 1969) pp. 147-184.

lointains.¹³

The goal of the adherents of the doctrine of sensibility is to find forms in which the truth of human intuitions will become transparent. As a result, the narrative truth becomes subjective but conveniently irrefutable and overpowering once it found expression in fictional language. Although Charrière employed the literary devices favored by the sensibility school, she had severe reservations as to the rigidly referential view of art it encouraged among its readership: “Les arts ne s'accomodent pas de la grande société, les hommes et les femmes y sont médiocres . . . [c]es livres dont on ne forme aucun jugement, aucune éducation qu'on ne lit comme un rêve” (III, 287).

In the above quote, Charrière proposes two seemingly disparate reflections on the arts, one of a general order, the other of an individual order. The first reflection claims that art does not “get along” with society, that the representation of men and women in arts is always mediocre. The second remark intimates that books should give a “form” to judgment and education. These two points reflect Charrière's position vis-à-vis the question of literature. Her interest centers on how art and specifically literature is linked to the possibility of judgment which is understood by Charrière as an appeal to a universal point of view. For Charrière, literature's “raison d' être” is its capacity to train, educate and otherwise engage our power of judgement. Hence the importance Charrière grants not only to what literature talks about (its representations) or to how literature represents its objects (its form) but to how literature allows judgments to be

¹³Angus Martin, Anthologie du conte en France, 1750-1799, Philosophes et coeurs sensibles. (Paris: coll. 10/18, 1981) p. 64.

formed. Similarly to her contemporaries Batteux, Rousseau, Condillac and Diderot. Charrière's interest lies in the relation between the works of art and the audience. But unlike Diderot, Batteux or Condillac whose theoretical reflections bear mainly on painting or on language itself, Charrière is more interested in discussing the relation of literary works to judgments of the readers.

In his Essai sur l'origine des connaissances humaines, Condillac provided one of the first articulations of the arbitrary nature of the sign that put particular emphasis on the increasing conventionality of human communication. Condillac explicitly correlated the development of the sign through successive stages of the scream, gesture, song, dance and finally language with denaturalization of the expression. Charrière's approach to literature made Condillac's theory of increasing conventionality relevant to the experience of reading (and writing). Before reading any works of literature such as poetry, dramas and novels, insists Charrière, readers should read works of theoreticians of language in order to familiarize themselves with the medium of literature, that is, language (its tropological system, grammatical structure, use of figures):

Il me semble qu'on pourrait commencer par Condillac . . . Batteux, les tropes de du Marsais. Cela prépare l'attention à se fixer sur le langage, le style, &c. Ensuite je voudrais qu'on suivit en quelque sorte dans ses lectures l'ordre des temps ne faisant que feuilleter Voiture, Balzac, lisant et relisant Pascal (le premier des esprits selon moi) puis Bossuet et Fénelon, & Scarron même & Mes de Sévigné, de la Fayette, de Maintenon (j'entends ses lettres) & tous les poètes qui ont illustrés les belles années du règne de Louis XIV. Après cela la langue change & devient peut-être encore plus précise.¹⁴ (V, 333)

¹⁴In a letter sent to her nephew, Willem-René Van Tuyll van Serooskerken, Charrière extends a similar advice: "une vingtaine de pages de littérature théorétique [sic] que nous trouverons dans Batteux & ailleurs . . . L'art poétique de Boileau appris par coeur exclusivement à toute autre poésie" (V, 592). She

In Charrière's opinion, by familiarizing oneself with language and style, one is not blinded by the representations themselves but is able to "link" the representations to formal as well as substantive questions. From Charrière's point of view, reading can produce knowledge in ways other than the traditional demonstration or exposition. Talking about religious as well as philosophical works, Charrière states that readers take the representations as the substance of the books, forgetting the tropological configuration of the content, their grammar, their deliberate use of figures. In Charrière's view, a judgment can take place only by taking into account both the formal aspect of the work (the form) and its substantive aspects (meaning): "l'un prêche le christianisme comme une doctrine utile aux gouvernements à l'ordre des sociétés, &c.. &c. Un autre le vante comme poétique, comme favorable à la tragédie, à l'épopée &c. Tout cela peut se disputer et ne change rien à l'essence de la chose" (VI, 190). And she concludes, "La littérature & la morale ne se traitent pas plus ad rem [en allant droit au fait]" (VI, 191). By saying that literature doesn't go straight to the facts, Charrière, skeptical as she is, doesn't mean to relegate literary works to the status of beautiful illusions that have nothing to do with reality. From Charrière's point of view, the creative process engages both beauty and understanding. What becomes beautiful is a form that ought to appeal

also counsels him to learn several languages so as to become aware of the artificiality of all language: "l'étude d'une langue facilite celle de toutes les autres, on a l'esprit tourné sur ce qui constitue une langue, & sur les différences qu'il y a entre les langues" (V, 594). Charrière insists that it is impossible to posit any judgment on a work of literature if one does not learn the rules of language. Taking the example of poetry, Charrière says that without knowing the rules of poetic art, the reader is not even able to posit a judgment of taste, to decide if the work is "bon" or "détestable" (V, 498).

both to the judgment of taste (the senses) and the judgment of understanding (the mind): “la difficulté de faire sortir la clarté du milieu du vague est comme toutes les difficultés une source continuelle de beauté” (VI. 192). Thus, Charrière acknowledges a possibility of beauty that instead of residing in the object itself or in its exposition would proceed from the “difficulty” the writer encounters while finding a form for ideas. Thus, literary art does not simply manipulate matters or reproduce facts but fosters new possibilities of their comprehension.

Charrière's valorization of “difficulty” rather unusual for her age, has an important practical consequence. Her reader is bound to get an impression that, unlike her contemporaries, she does not strive to reveal the rational structure of human experience in commentaries and explanations but presents him with “riddles,” hermeneutic conundrums that challenge the intellectual clichés of her time. One difficulty that the readers of Charrière can't ignore is her tendency to cast critical reflection (on moral or political subjects) in the form of the narrative. This difficulty doubles once Charrière turns her attention to literary matters, since in that case, the reader is often faced with a literary text that is simultaneously a critique of another, thematically related work of literature. As a result of this devious narrative strategy, Charrière's “clarity” can never quite escape the “difficulty” it sought to overcome. The interpretation of literature “repeats” literature.

The repetition of convention that we identified as a basic characteristic of Charrière's literary practice can also be seen when, in response to the contemporary

debates, she concerns herself with the rhetorical device that is also meant to repeat or be repeated, i.e., an example.¹⁵ The examples Charrière would choose for her novels tend to undercut the referential stability expected of the educational novel of her time and expose the process of the formation of the example as such. In her works as well as her correspondence, Charrière insists that literature has its own specificity which contains a critical potential. Charrière's works are critical in virtue of her exposition of the function of mediation that literature takes upon itself when a moral or political issue is at stake. By mediating her own examples through the prism of literary canons, that is directing the reader not to the outside world but to the world of literary representations, Charrière directs the attention towards the encoding of the examples, the work of thought-process and not of a mere imitation of social reality. The examples for Charrière are unstable constructs which expose their own duplicity. They are not only mediated but compromised since what is meant to be inferred from them (norms of taste, moral qualities, historical testimony) can never escape the risk of being forged by the canonical precedents. However, Charrière's analysis of examples goes beyond an allegation that exemplarity of fiction is merely an intralinguistic/literary phenomenon. Charrière redirects a critical discussion of examples to the problem that is at the root of

¹⁵ In his Exemplum. The Rhetoric of Example in Early Modern France and Italy, John D. Lyons analyses the use of the literary figure example in the literature of 16th and 17th century and shows that it is one of the most used literary strategy of the time. However, if the use of examples is still predominant in the 18th century, with the poetics of sensibility, exemplarity becomes the modality of literary creation as a whole rather than one of the strategies. In short, the text does not just use examples to show conformity to ideas, but itself becomes the example. For a theoretical analysis of examples from a variety of perspectives, see Alexander Gelley, ed. Unruly Examples: On the Rhetoric of Exemplarity.

the controversy over the genre of the novel, namely, the possibility of normative knowledge in the age when Voltaire and Montesquieu had sapped the authority of the church in relation to morals.

The following statement from Dorat, a writer of epistolary novel as well as a journalist, is representative of the novel debate of the time:

Le roman, tel qu'il doit être conçu, est une des plus belles productions de l'esprit humain, parce qu'il en est l'une des plus utiles: il l'emporte même sur l'Histoire: ce qui ne serait pas difficile de prouver. L'histoire n'est le plus souvent qu'un tableau monotone de vices sans grandeur, de faiblesse sans intérêt: qu'une collection de faits piquants pour la curiosité seulement et en pure perte pour la morale. Le roman, quand il est bien fait, est pris dans le système actuel de la société où l'on vit: il est, osons le dire, l'Histoire usuelle, l'Histoire utile, celle du moment¹⁶.

In Dorat's comments, we can still discern the perennial literary imperative: Literature has to be useful. The genre of the novel was held as a "useful" and "educational" genre by writers such as Rousseau and Sade¹⁷. The novels, they argued, would teach people what is moral and what is not. And novels were discussed in terms of the moral "values," i.e., as examples. The moral value of the novel debated at the time presupposed that the relation of the values exposed in the text to the values of the social world was unproblematic. If for Dorat as well as Rousseau and Sade the "value" of the literary discourse was to be found in the qualities and defects of the "examples" portrayed in novels, for Charrière, the exemplarity of the examples is in the fact that

¹⁶Dorat, Les Sacrifices de l'amour ou Lettres de la Vicontesse de Senanges et du chevalier de Versenai (Amsterdam-Paris, 1771), p. 11.

¹⁷ D.A.D de Sade, Idées sur les romans, (Genève: Slatkine Reprints, 1967), p. 3.

examples are already encoded or in other words, that their meaning is “overdetermined.” In her remarks on the issue, Charrière keeps returning to the same question: How can the examples in literature be useful in terms of cultural practice given that writing novels betrays a propensity toward falsification, self-isolation and an overly active imagination. How can an aesthetic form guarantee fidelity to any cultural practice? The answer Charrière gives is that the truth of the novel resides not in the metaphorical relation of the text to a certain reality, but in the reader’s cognitive relation to the text. In Charrière’s view, what is represented in the text is not so much a reality of social interactions but the judgments a writer makes about social reality and how writers formulated them. Fictional examples become for Charrière the most productive tools since they operate on the esthetic, grammatical as well as social, moral and ideological levels of writing. Charrière exploits the hybrid nature of the example and refuses to separate text and context. Her examples both reflect previous literary texts and offer a reflection on social organization, morals and politics. Like Dorat, Charrière recognizes that literature is a discourse permeated with cultural values. However, unlike Dorat, she calls attention to disciplinary norms that are implicit and that are internalized by way of reading.

An example of Charrière’s constant attention to the emergence of meaning in language can be drawn from a letter to her friend Henriette L’Hardy in which she discusses the signification of the word “bonne.” Although usually it is the denotative use of words that gives meaning to our utterances, sometimes it happens that a connotative use contributes as much. In While commenting on the exclusively

“connotative” use of language by her neighbor. Charrière remarks:

Les mots ont dans sa pensée une acception exaltée, dans sa bouche une expression emphatique.-“Oui Madame ma nièce est gaye, franche, bonne, oui bonne!” Je ris & lui avouai que ce mot “bonne” n'avoit pas pour moi toute la grandeur qu'elle lui donnoit. Elle ne se fâcha pas car elle est loin de m'entendre & jamais elle ne m'entend. Le “simple” est pour elle une grande belle chose qu'elle admire avec méthode et compliqueusement ... Mon Dieu où en sommes-nous quand le simple n'est plus simple, quand il ne peut être aperçu & apprécié, quand le mot qui l'exprime devient une énigme romanesque . . .(IV, 75)

It is clear that Charrière’s interlocutor expects that the connotative use of “bonne” will supply full signification to the term. She emphatically asserts that her niece is “bonne” as if the predicate by itself could articulate a quality. Her judgment is a value-judgment which loses its signification precisely because she performs it, repeating the word as an automaton, hoping that with each repetition and each theatrical gesture, the word will become more and more meaningful. Because in the above scene the words take on meaning exclusively through their staging, they do not mean anything, and lose the possibility of being substituted with other words. No word or concept can substitute for the performance of the interlocutor, and language becomes dysfunctional or purely rhetorical (in the sense of persuasion). For Charrière’s interlocutor, the meaning of “bonne” depends solely on the repetition of the word, and gives her the illusion of referentiality. The importance of this passage resides in Charrière’s insistence that to be able to establish communication, there should be an intertextual network of association, rather than a performance whose pragmatics is likely to be different from that of meaning.

The distrust of simplicity evident in the closing lines of the quote above acquires

further significance once we take into consideration that epistolary novels often presented themselves as simple, transparent and authentic. As a writer of epistolary novels, Charrière sought to complicate the avowed simplicity of the epistolary genre.¹⁸ If the epistolary novel does represent a performance of the “experiences” of the narrator, it does so up to a point. In case of the epistolary novel, one has to probe beyond the performance. The epistolary novel should produce the effect of simplicity but this doesn’t mean that such effect is simple to achieve. To achieve this effect of simplicity means for Charrière to give to the letters an appearance of communicating directly the thoughts and feelings of the letter-writer, of translating directly what we could call the epistolary “voice.” It is not an accident that this particular aspect of the novel in letters, the presence of the voice, served critics of the epistolary novels as an anchorage point for their classification of epistolary novels. Jean Rousset, Janet Altman, Laurent Versini all classify the novel in letters according to the number of voices appearing in the text. This expectation of the authenticity of the “voice” expressed in letters was also amply illustrated by Charrière’s contemporaries when the writers, in order to enhance the truth-effect of the representation of emotions, presented their novels in letters as texts found by or given to the editor, translator or copyist who insisted on the authentic and genuine aspects of individual experiences.¹⁹

¹⁸Jan Herman describes epistolary novel in Le Mensonge Romanesque as “le roman de l’instantanéité et de la fragmentation, roman simple et trop souvent simpliste”(10).

¹⁹Les Lettres portugaises was advertised as a translation of letters found by the publisher who merely corrected the misprints. In Lettres d'une Péruvienne, the publisher announces that these letters have been translated from Peruvian into

In her study Epistolarity: Approaches to a Form, Janet Altman locates epistolary discourse within the larger domain of verbal exchange and notices that its hermeneutic code is transferred from the level of the plot to the level of communication. As such it displays a mimetic relation to correspondence, making the letters in novels a process of literal and textual reproduction. This technique creates an illusion of true testimony and offers a narration without interference from an external agent. As Jan Herman remarks in Le Mensonge Romanesque, this technique which he qualifies as “hybrid discourse” illustrates and enacts the 18th century project of the transformation of the question of external verisimilitude (questions of the truth of the manner in which the epic and the tragic had become exemplary for good writing) into a question of the authenticity of the narrator’s voice. As a result of such transformation, the critical literary debate about the truth of a genre becomes secondary to the issue raised by the new literary project: the effect of scripted enunciation.

Charrière incorporated into her epistolary practice both sets of values, namely, a preoccupation with the authority conferred by verisimilitude and the problematic centering on the authenticity of the epistolary voice. As Janet Altman reminds us, “Epistolary language is preoccupied with immediacy, with presence ...” (135). And it is this sense of immediacy and presence that now guarantees the truth of what is said. Hence, the novels in letters not only have to give the illusion of the authenticity of the

French. In Lettres persannes, the publisher merely copies letters left to him by two Persian friends of his. In La Nouvelle Héloïse, Rousseau avows to have revised the letters. And in Les Liaisons dangereuses, the publisher denies the authenticity of the letters and calls them a novel.

experiences of the narrator-writer but also to give the illusion that the writing is secondary to the presence of the writers. The emphasis is no longer on how the feelings and the experience are represented, an esthetic imperative of the 17th century, but how they are authentic to the person who describes them. In short, what counts is the authentic communication between writers and readers.

From Charrière's point of view, direct representation is unworthy of the art of letters as well as other arts: "Les arts ne s'accomodent pas de la grande Société, les hommes et les femmes y sont médiocres" (III, 287). Fictional examples cannot be historical examples. Nevertheless, Charrière would still maintain that fictional examples are meaningful and educational representations of a social world. How so? The exemplarity of novels for Charrière consists in their ability to arouse a desire for judgment in the reader as she herself makes it clear by rejecting: "Ces livres dont on ne forme aucun jugement, aucune éducation, qu'on ne lit que comme un rêve . . ." (535). Charrière is a critic, reading by refraction the social text as well as works of other writers. Charrière's epistolary practice is a perfect illustration of Jean Rousset's remarks on the epistolary novel: "On lit en filigrane et par réfraction tout ce qu'on n'a pas pu lire en clair: la part est donc considérable, qui est faite à l'intervention du lecteur, à ses dons de rectification et d'interpétation. Le lecteur est prié d'être intelligent."²⁰

For Charrière, "le simple n'est plus simple," and the authority of the voice of the epistolary writer is transferred to the critical judgement found in the words written. Words are no longer witnesses to a separate oral voice. The fictional epistolary voice

²⁰ Jean Rousset, Forme et signification (Paris: José Corti, 1984), p. 80.

gives up its function of witness to the oral discourse in order to find its authority within the written word itself. In the course of her reflections, Charrière comes to the conclusion that writing is not an instrument for expressing a truth that exists prior to and outside of writing, it is an activity through which writers explore their world, experiences, but also their readings. Therefore, Charrière's writings are interpretation and dialogue with previous judgments. Through the creation of her own poetics, Charrière gives new meaning to the established literary tradition. Moreover, Charrière's epistolary novels complicate the question of transparency and communication in the literary process as her novels cannot be thought of without their intertextual partners, their canonical ancestors. As we will see in the chapters that follow, Charrière's fictions defy generic categorization and raise problems of representation that compelled her to seek fresh modes of composition beyond the bounds of any traditional mode. The shift from illustration to exemplarity achieved in Charrière fiction results in the introduction of the new thematic elements into the epistolary genre. With Charrière, epistolary novels will take a new detour when instead of the persistent theme of love, she is going to try to make sense of moral as well as political problems, leaving the theme of amorous relation in the background. Rather than using examples as an illustration of the truth arrived at by the author, Charrière's fictions use examples to induce the reader to reconsider the cultural fictions that constitute the hermeneutic horizon of reading. Instead of appealing to social reality directly, Charrière's fictions often appeal to the world of cultural archetypes with the help of which these realities have been represented. In Lettres neuchâtelaises, Charrière's description of a wine-harvesting

scene recalls the more famous literary example of wine-harvesting in Rousseau's La Nouvelle Héloïse. In Lettres de Mistress Henley, Mistress Henley's naive and positive outlook on the world recalls her famous predecessor Candide from Voltaire's conte philosophique. In Lettres de Lausanne, the mother daughter bond restages the exemplary mother-daughter bond from La Fayette's Princesse de Clèves.

Thus, the practice of epistolarity in Charrière brings forth the complicated issue of imitation and repetition in literary writing. For Charrière, in order to write, one needs an apprenticeship in the "graphie," the grammar, the style, and no authenticity or presence can replace it. In her correspondence, Charrière emphasized that confessional transparency is precluded by the use of words whose meaning is limited by conventional language. Nevertheless, transparency remains a main element of her writing, but instead of locating transparency in the urge to confess, she sought it as the effect of her writing. This shift from transparency as a psychological precondition for writing to transparency as the effect of writing itself is paramount for the principal question of the truth of the letter. By contaminating the authority of the authentic with the authority of the verisimilar, Charrière enacts what Deleuze and Guattari have called a "déterritorialisation"²¹ of the "great" literature of intimacy and individualism.

Charrière wants her presence to be known only as mediated by her pen. Her "presence" disappears in the word which becomes the only authority. "Cogito" becomes subordinate to "scribo." Charrière's writing is not merely a compilation of the author's

²¹Deleuze, Gilles and Guattari, Félix, Kafka: pour une littérature mineure, (Paris: Editions de Minuit, 1975), esp. pp.15-25.

thoughts, or a reproduction of social reality but a living evidence of her effort to make sense of both realities at the same time, a testimony to the practice that kept her sane:

Quant à n'écrire à personne comme je ne vois personne cela ne se peut ni ne se doit: je deviendrais folle d'ennui ou je m'hebêteroïs entièrement. C'est justement quand ma plume s'est fourvoyée que je m'amuse à la suivre dans le labyrinthe au lieu de l'en retirer, & après avoir parcouru d'étranges sentiers il se trouve pourtant que nous sortons de là passablement à notre honneur. C'est ce jeu fou ou sage que je vous proposois. (III, 834)

In bringing writing as a cultural practice to the fore, Charrière questions a position of certainty in universal understanding characteristic of the Enlightenment period. For her, certainty in the power of human reason or communicability of human emotion does not derive from the presupposed state of nature or confidence in mankind but bases itself on an active process:

Ecrivez, écrivez. Vous ferez une connaissance plus intime avec vous-même, quand vous vous rendrez compte de ce que vous avez fait et pensé. Vous apprécierez aussi mieux les autres en détaillant leur conduite. Ce qui peut rester d'encore un peu vague, d'un peu confus, d'un peu mal digéré dans vos jugements sur mille choses, se dissipera . . .
L'esprit même en se formant s'augmente. (IV, 27)

In Charrière's dynamic approach, writing shapes "esprit" (which in French means mind but also spirit and wit) and thereby gives birth to one's own understanding and judgment. In Charrière's writings the esthetic function of the text is supplemented by the ethical modality since she continually puts the reader in the position of judgment. For Charrière, both style and judgment have to receive an education. "L'esprit même en se formant s'augmente" could be understood as a continuous involvement in experiencing and defining the boundaries of meanings and associations surrounding

each judgment on social reality. As “the mind takes on a form, it expands itself.” that is, as “l’esprit” becomes a world of figures, the meaning of social reality becomes increasingly uncertain. As a result, fictions are needed as a mediating world of forms with the help of which and onto which the writer would be able to posit a judgment.

The production of fiction as Charrière envisioned them requires a special apprenticeship in writing. As she put it,

Quand la plume ne va pas comme d'elle même il n'en faut pas moins qu'elle aille. On s'imagine qu'elle ira mal, mais point du tout, les plumes qu'on gouverne sont à la longue les seules qui aillent bien. Trop de gens, trop de femmes surtout sont la dupe de leur paresse & voudroient ne rien faire que par soudaine impulsion. & voilà pourquoi la perfection est si rare. On attend qu'on soit en train tandis qu'il ne tient qu'à nous de nous y mettre. Si une première lettre n'est pas bien il en faut écrire une seconde, une troisième. Je ne recommence que pour faire plus mal, disent beaucoup de gens; qu'en savent-ils? ont-ils jamais bien obstinément [sic] recommencé? L'esprit est comme la main, comme le pied, la jambe & l'on devient capable de penser d'écrire, comme de danser & de jouer du clavecin, à force d'exercice. (IV, 32)

Charrière here distances herself from the credo of the Enlightenment. For her, there is no static human nature that you can intuitively know. You can know human nature only through a process and in a process (of writing, for instance, as in the quote above). This vision of human nature likens Charrière's views to the ones that would be later expounded by the Romantics. From Charrière's point of view, the mind has to be trained, to be exercised, and writing is the medium of its exercise. The mind functions here not as an “organ” waiting to discover a truth which had been originally impressed on it, but as a mere potentiality in need of acquiring mechanical training in order to perfect itself. Charrière is no philosophe confident in the expansive character of human reason. On the contrary, she never stops reminding her readers that learning is

fundamentally repetitive: “Vous barbouillerez vous recopierez; vous effacerez. vous perfectionnerez. & il se trouvera que bientôt vous écrirez comme Voltaire comme Buffon. non comme vous mais aussi bien qu'eux & avec autant d'élégance & de précision que de simplicité & d'esprit” (IV, 27).

In the letter quoted quote. Charrière advises her correspondent to imitate the style of Voltaire or Buffon at the same time. She is also advising her to erase their style in order to perfect herself. What, then, should her correspondent copy and what should she erase in order to perfect herself as a writer? The fact that Charrière puts side by side two writers as different as Voltaire and Buffon, one being an “ideal” writer of fantasy tales with social subtext and the other the “scientific” writer concerned with laws of nature seems to hint that Charrière's concept of imitation is not a simple one.

In Charrière, imitation becomes a complex act that should both copy and transform Voltaire and Buffon's exemplary styles. In this regard, the verb “effacer” is most illuminating, for it urges the reader both to preserve the face of the writer – his style – and to erase it. Charrière's advice, far from advocating a singularity of inspiration, invites her correspondent to practice a double inscription in her writing, to write, what others have written, over. If we understand this “writing over” in terms of translation, we could say that “effacer” consists in preserving traces of the original and at the same time deforming them. Charrière's scribo is far removed from a mere act of imitation, a simple transcription. Charrière's work as the work of a translator becomes the work of a critic since her goal is to repeat certain configuration, even a certain style, but at the same time to disintegrate the original by accentuating certain details or, as De

Man formulated it. "to set it in motion:"

Benjamin ... displaces them (tropes) in such a way as to put the original in motion, to de-canonize the original, giving it a movement which is a movement of disintegration, of fragmentation. This movement of the original is a wandering, an errance, a kind of permanent exile if you wish, but it is not really an exile, for there is no homeland, nothing from which one has been exiled.²²

Her work as a translator becomes the work of a critic since criticism as well as

translation brings out the mobility and instability of the source-text. In a way,

Charrière's practice of writing consists in taking a canonical text and "translating" it.

We can easily appreciate Charrière's innovation by putting it side by side with the

classical ideal of writing as expressed in Boileau's famous injunction: "Ce qui se conçoit bien, s'énonce clairement et les mots pour le dire nous viennent aisément."

Taking her distance from such precepts, Charrière's understanding of clarity is to be found not in the mind but on paper, in the writer's continuous involvement with writing.

Writing comes to the fore not as the expression of thinking but as thinking itself. This

understanding of writing likens Charrière to the German Frühromantik. Writing, for

Charrière, does not merely display critical reflection (as it was the case for Diderot or even the Goethe of Wilhelm Meister) but becomes the act of critical reflection itself.

This dissertation will explore the critical reflection that Charrière's writing brought to such momentous tendencies (to borrow Fichte's expression) of her day as the fictional and philosophical writings of Rousseau, the moral philosophy of Kant and the

²²Paul de Man, "'Conclusions': Walter Benjamin's 'The Task of the Translator,'" The Resistance to Theory, Theory and History of Literature, Volume 33 (Minneapolis: U of Minnesota P, 1993), p. 92.

events of the French Revolution. All these disparate elements are bound together by Charrière's examination of exemplarity. The work I offer examines the conceptual and narrative functions of the example both in the critical writings of Charrière and their formulation in her literary works. Rousseau, Sade or Dorat had claimed a separation between the creative process and its end products, i.e., representations themselves. If in the case of Charrière, the examples or representations cannot be thought without the process of creation, then what do these representations represent?

Charrière's epistolary novels can be read from a historical, philosophical and theoretical perspective. A historical perspective would follow their articulation of the evolution of a new literary strategy that escapes the rigid opposition between authenticity and verisimilitude dominant at the time. Thus, Charrière's writing would become exemplary of the shift in the poetics of the novel that presided over its ascendancy as the Modern genre par excellence. Such perspective would also remark Charrière's odd position with regard to the established categories of Enlightenment and Romanticism. Even though she never deviated from a standard Enlightenment agenda (education of mankind in light of universality of reason), her treatment of the topics implied by this broad heading anticipates sophisticated formal strategies that the Romantic ideology would bring. A philosophical perspective would read Charrière's oeuvre in terms of the changing epistemology of the subject trying to come to terms with the rapidly evolving historical reality. It would also have to evaluate the fact that the discussion of the philosophical issues – obligation or the political – had to be cast for Charrière in fictional form. Was it an attempt to make up for the destructive effects

of the rapidly increasing rhythm of history that doesn't allow for the traditional formation of rules and norms? Or is such fictionalization of the philosophical a necessary element in the construction of any philosophical discourse? Finally, a rhetorical approach would examine Charrière's work from the point of view of its dominant trope, namely, the example. Charrière's writing practice is unique in that for her the figure of example becomes the modality of the text itself rather than one of its rhetorical modes. The effects disseminated in her novels that I have referred to as "hybridization" no doubt result from this privilege. This dissertation tries to combine all these approaches in order to yield a reading of Charrière that would do her justice without overstating or underestimating the limits of her significance today.

My reading and research have convinced me that Charrière's contribution to evolving esthetic and ethic project of the Enlightenment period should have assured her a place in the canon. In particular, the attention she brought to the symbolization of social, political and historical experience should have distinguished her from more straightforward approaches to representation characteristic of her time. Charrière was one of the first to recognize that narratives become the conditions if not the imperative of representation of social ideas in the modern age. This aesthetic mediation between social reality and its conceptualization, as Charrière has shown, can be put to the most political use possible – namely, the training of judgment. Charrière's novels illustrate this process of mediation.

II. PLAN DE THESE

The first chapter of the dissertation considers the theoretical examination of exemplarity in Charrière's works and her use of the epistolary genre as the privileged mode of expression for such theoretical questions. The combination of disparate elements characteristic of the epistolary novels (multiplicity of narrators, interweaving of reading and writing, shifts in narrative continuity and authority, etc.) allows Charrière to question exemplary fictions as well as examples in fictions. Epistolary novel becomes a matter of critical method rather than an historical illustration of the genre. The textual part examines the thorny question of representation by questioning the configuration of examples in Lettres de Lausanne.

The second chapter contrasts Charrière's confrontation with Rousseau with those of her contemporaries who held Rousseau's writings as dominant examples not only for their political theories but also in morals and fictions. Charrière invites the reader to concentrate on Rousseau's writings, and, in accordance with her critical approach, creates a fictional example of her own which will question ideological and thematic exemplarity in Rousseau's works. The discussion of the creative process of Rousseau's works lead her to enter in dialogue with the figures and the style Rousseau used and in her turn to use figures and style to posit a critical judgment on Rousseau's works. The second half of the chapter examines Charrière's critical transformation of La Nouvelle Héloïse in her Lettres neuchâteloises.

The third chapter studies the complexities of representing "devoir," the key-concept in Kant's moral philosophy. Charrière's literary technique shows that when

moral philosophy is proposed under the forms of examples it is mainly concerned with a fascination for moral evaluation instead of a thorough investigation into the concept of morals. In Trois Femmes, Charrière fictionalizes Kant's categorical imperative and aspires to arrive at the philosophical as well as practical criticism of his moral system by means of her fictions. In her narrative, Charrière shifts emphasis from Kant's systematic articulation of the a priori moral principle to the question of its practicability in the world of action. By becoming the "free" space where the a priori, i.e., unrepresentable principles, can be figured, literature in Charrière contributes to the philosophical education of mankind.

The fourth chapter examines Charrière's persistent preoccupation with the political change she saw taking place during her lifetime -- the French Revolution. Charrière's "sceptic" concern with the form and figuration of judgment traced in the chapters on Rousseau and Kant becomes particularly striking when we turn to exploring her reaction to the "real" political event. The French Revolution for Charrière is not merely a historical background for her stories. Rather, it offers an opportunity to assess the role played by fictionality in political discourse eager to establish the Revolution as its proper origin. With the use of her double irony, decontextualization of literary antecedents, in Lettres trouvées dans les Portefeuilles d'émigrés Charrière once again warns her readers against following in Don Quixote's footsteps and highlights the rhetorical and normative aspects of any historical discourse.

Chapter One: The Spirit of the Letters: Authenticity, Exemplarity, Education in Charrière's Literary Practice

Lettres de Lausanne (1787) is the most well-known epistolary novel of Isabelle de Charrière and has been the focus of wide critical attention. The novel includes two parts. The first one contains twenty letters of a mother to a relative of hers on the subject of her daughter's education and the second part contains one long letter written in the form of a memoir in which one of the characters William recounts the tragic story of the loss of the woman he loved. The critical response to the novel can be divided into two camps: Some critics emphasize similarities between the two parts, others concentrate on the division of the novel in two different sections²³. By and large, modern critics have focused their readings on the innovative exemplary nature of Cécile, the heroine of the first part of the novel in contrast to the more literary conventional representation of Caliste, the protagonist of the second part. As a result, Lettres de Lausanne is held as a feminist manifesto, or as the realization of a feminine private destiny that takes its place

²³In Le Roman Féminin (Paris: Presses Universitaires de France, 1976), Michel Mercier, concentrating on the plot, states that both Caliste and Cécile are representatives of women who do not oppose the social order that so arbitrarily excludes them. Monique Moser-Verrey analyses the first and second part in terms of degrees, pointing at the fact that Charrière was writing a play at the time called La Famille d'Ornac with the same plot structure, the problem of marrying off a young girl. "Isabelle de Charrière en quête d'une meilleure entente," Stanford French Review 11 [1987]. In "Devious Narratives: Refusal of Closure in two Eighteenth-Century Novels" Eighteenth-Century Studies, 21:1 (Fall 1987) Elizabeth MacArthur views Caliste's life with its pathetic ending as a "camouflage" for the less conventional situation of Cécile. Susan Lanser discusses the novel in terms of the rise of the Male Romantic voice that would soon dominate the literature of the early nineteenth century. Fictions of Authority: Women Writers and Narrative Voice. (Ithaca, N.Y.: Cornell UP, 1992).

on the masculine public scene, or as a takeover of female voice on the masculine public stage. While commenting on the three final letters, Jenene Allison²⁴ notes that the exemplary nature of Lettres de Lausanne is to be found in the revelation of a “new woman to woman discourse.” In short, whenever Cécile or Caliste are invoked, it is as support for the general proposition that Charrière depicted a world of social condition of which women, the main topoi are represented as exemplary individuals. What is claimed implicitly is that the validity of this proposition, women and their exemplary nature is self-evident. Hence, Cécile becomes a prototype of a successful woman and Caliste the prototype of a failed woman or Cécile is the embodiment of a free woman and Caliste the embodiment of a woman cast in patriarchal discourse. However, in her correspondence, Charrière wrote: “Les arts ne s’accomodent pas de la grande sociabilité, c’est pourquoi Dames et Messieurs y sont si médiocres.” (III, 287). From her saying we can infer that Charrière’s representations of women cannot simply be used to recognize some exemplary form of womanhood but maybe can be perceived as a reflection on the nature of exemplarity in literature. For Charrière, one of the main characteristic that distinguish literary examples from other discursive examples is that literary examples are submitted to the requirements of style, as she clearly states it when she talks about Voltaire’s works : “Une des choses qui m’a le plus frappée, c’est le peu de verve avec laquelle il composait. Toujours prêt à changer pour plaire davantage ou plus vite, il n’avait point de conception forte, ni vive, ni entière de ses caractères, ni de son sujet et

²⁴Jenene Allison, Revealing Difference :The Fictions of Isabelle de Charrière.

il prostituait ses tragédies à peu près comme ses louanges” (III.140). Charrière criticizes Voltaire for prostituting his art. What is at stake with Voltaire is that in order to convey his ideas, he does not obey by the rules of writing. One may recall Zadig and the fabulous adventures of his hero which neither correspond to the laws of the unities nor to the esthetic of verisimilitude dictated by the genre of the memoir novel. Thus, Voltaire reveals himself as a writer with an ideological program, one of the first Enlightened philosophers with a clear political position. With her remarks, Charrière intimates that literature should refuse to lend itself to appropriation. But in Voltaire’s defense, one can pose the following questions: Can literature avoid prostituting itself? Is it fair to accuse Voltaire of the charges that properly belong to his medium of expression? In response to these questions, Charrière would maintain that literature is more than a simple distraction: “Mais Aristote, Quintilien, Ciceron, Demosthène sont fort bons à lire comme à avoir lus, & il faut s'accoutumer si l'on veut savoir quoique ce soit, même la frivole littérature, à dévorer patiemment un peu d'ennui” (VI, 230). Why does Charrière insist that one has to read philosophers like Aristotle and rhetoricians like Cicero and Demosthene before reading “frivolous literature”? I would venture to say that with her remarks, Charrière wanted to counteract a tendency to forget the literariness of literature, a tendency fostered by the literature of verisimilitude. What became preeminent as was the case with Voltaire is that literary examples are discussed in terms of their usefulness as examples of a social, historical or psychological reality, instead of the possibility of a reflection on how they came to be produced, that is how meaning is formed.

Responding to the problem of exemplarity in literature. Charrière produces her own literary examples amongst which Lettres de Lausanne. I would argue that Charrière's Lettres de Lausanne is crucial to an understanding of Charrière's views on literature. At first, the reader notices that the novel is composed of two distinct parts that make use of two different styles: One is characterized by discursive cogitative style and the other is characterized by a focus on feelings. In addition, the thematic of the novel (women's destiny) never offers a clear statement in favor of one or the other of the protagonists, leaving the reader with a sense that the novel is incomplete. The incompleteness of the novel was commented upon by critics in Charrière's time as well as today²⁵. This "unfinished novel"(as critics noted) will suffer in the history of its publication.²⁶ However, knowing Charrière's education in literary history as well as her

²⁵In ("The Novels of Isabelle de Charrière, or, A Woman's Work is Never Done." Studies in Eighteenth-Century Culture 14 1985: 299-306), Susan K. Jackson takes the position that Lettres de Lausanne seems unfinished because Charrière chooses to plot feminine destiny as a paradigm not of a tragic destiny but along the line of women's handiwork: "[F]emale life [...] is rendered shapeless, open-ended [...] but at least not necessarily or uniformly tragic in close conformity with the model provided by female ouvrage". In: ("Designing Women" in A New History of French Literature, ed. Dennis Hollier [Cambridge, Mass.: Harvard UP, 1989], 556), Joan Hinde Stewart concludes that the "indeterminacy" of the two parts "mimic the heroine's contingency, their social, economic or affective estrangement."

²⁶Lettres de Lausanne was first published separately from Caliste ou les suites de Lettres de Lausanne, probably in Switzerland in the spring of 1785, and received mixed reviews. When it was reprinted in Paris, Chez Buisson, in 1786, the reception was much more favorable. In January 1787, the two parts appeared together, chez Prault, with a revised version of the first part. Lettres de Lausanne became a great success. It was reedited in 1788, chez Prault but lacking the three final letters of the novel. Under this form, it was translated in German, in 1792, and in English in 1799. In 1807, it was reedited chez Paschoud but the reedition did not include the three last letters. It is only in the complete publication of

particular attention to style. one may wonder why she would choose to give such an “unfinished form” to her novel? The appearance of incompleteness is characteristic of most of Charrière’s novels and therefore can be seen as one of her preferred literary devices. In addition to not ending her novel Lettres de Lausanne “properly” Charrière divides it into two separate parts each exhibiting its own style. We would venture to say that Charrière’s literary strategy is directly related to her theoretical vision of literature and particularly to the role of the reader. In all her novels, it is safe to say that Charrière refuses to exempt the reader from the process of reflection as she states it in the following remark: “Ces livres dont on ne peut tirer aucun jugement.” By structuring her novel like a jigsaw puzzle, Charrière forces the reader to figure out how the pieces all fit together. Unlike writers of novels with proper ending, Charrière does not allow the reader to be “transposed” into the world of “fictions” which means she refuses her reader the possibility of being illusioned by the novel. Even though she uses rhetorical effects and a complete array of literary devices, Charrière refuses to grant literature its status as illusion.

Hence what is at stake in Lettres de Lausanne is the knowledge, the reader of a literary text can draw. Or in Charrière’ own words, how does a reader form a judgment on literary works, and what type of judgment can a reader brings to a literary work.

Besides the theme of moral and literary education that the mother of Lettres de Lausanne develops, she also recounts her daughter marriage prospects. Cécile, who has

Charrière’s works in 1789, that the three final letters were finally included. For a detailed history of the publishing of Lettres de Lausanne, see O.C., (VIII, 125-133).

several suitors, falls for an English Lord, Milord Edward who fails to propose. To change her daughter's mood, after the failed attempt at marriage with the young Lord, the mother takes her on a trip to France. Cécile's story stops with the departure of the two women and is followed by the story of William, Milord Edward's relative and friend who recounts his own failed attempt at marrying the woman he loved, Caliste. The long letter of William ends with three more letters one from the mother to William, the second from the parents of Milord Edward to William and the third from Cécile to her mother.

The two different storylines make use of two different genres: an epistolary novel and a memoir novel. Charrière's narrative strategy, the construction of a pseudo-opposition between an exposition of didactic norms and a narrative illustration of emotions raises the question of verisimilitude and exemplarity in an innovative way. Indeed, the narrative construction of Charrière's novel seeks to problematize the relationship of language and the events it refers to. The genres, Charrière uses in Lettres de Lausanne, demonstrate different relationships to truth. The epistolary novel identifies truth with the discourse of the one who speaks, whereas the memoir novel separates the truth of narration from the truth of the event. In this context, to take Charrière's representations for granted is to misunderstand them. When the reader decides what Caliste or Cécile stands for, he/she is likely to make a choice from an external point of view which reveals more about the ideological or literary expectations of the reader than about Charrière's examples. Thus, Charrière's interest in Lettres de Lausanne lies in the rhetorical and historical construction of the example, rather than in what is exemplified.

This is why the same subject matter (the marriage attempt) returns in the guise of two narratives placed side by side.

The proper names of the two main female characters in Charrière's story signals her preoccupation with the role of archetypal conventions in literary narratives. Cécile's name recalls Cécile de Volange, the young heroine of Laclos' Liaisons dangereuses, who was caught within the web spun by two super readers, Merteuil and Valmont. But Charrière's Cécile improves greatly on the Cécile of Laclos in that she was taught to read carefully and would never mistake a shoemaker for a potential suitor! In contrast to Cécile, Caliste got her name from Calista, a character in Nicolas Rowe's play, The Fair Penitent: "C'est le nom qui lui était resté du rôle qu'elle avait joué avec le plus grand applaudissement et unique fois qu'elle avait paru sur le théâtre" (VIII, 191). In Charrière's Caliste, Caliste mimics the theatrical performance of the fate of Calista. Caliste, who was brought up to become an artist, lived with her lover an English gentleman who died, without marrying her. As a result, Caliste was permanently tainted by the loss of her virtue. This loss is the cause of her not marrying William. In Nicholas Rowe's drama, Calista, a married woman kills herself on the tomb of her lover as she learnt that he died at the hand of her family. The play concludes with the following statement, explicitly addressing the question of exemplarity: "By such examples are we taught to prove/the sorrows that attend unlawful love." The examples Charrière's characters refer to, Cécile of Laclos and Calista of Rowe are both presented by their authors as negative examples. But Charrière's example tries to upstage this mimetic relation to examples forged by both the theatrical performance (Calista) or the poetics of

verisimilitude (Cécile of Laclos).

Charrière's choices of proper names for her heroines is to underline the importance she grants to the act of reading. It is impossible to decide what either of the heroines stands for since the logic of the proper name which should have guaranteed the "proper" voice and identity of both of the characters is caught in an intertextual mosaic. This insistence on writing, reading and interpretation can be glimpsed in the fact that readers shift positions within the story. The epistolary writer of Lettres de Lausanne, for example, becomes the reader and critic of Caliste and William, a character of Lettres de Lausanne becomes the narrator-writer of the story of Caliste. Rather than framing a ready-made answer, Charrière's literary technique incessantly poses the following questions : Who controls the narration? How is the story to be read? Who interprets the story?

In Caliste, William is able to narrate the story but unable to interpret its events. At the end of the story, Cécile's mother will provide the interpretation that William could not. She accuses him of lacking foresight and imagination: "Mais en relisant, en méditant, en comparant je trouve qu'il vous a manqué de prévoir ce que les événements produiraient sur vous ou sur les autres & que vous n'avez point eu d'autre tort ou d'autre défaut. Je la comprends cette ignorance, cette imprévoyance, cette indolence de l'imagination" (VIII, 239). In a word, the mother accuses William's imagination of producing only the most conventional story. Thus, within Lettres de Lausanne, Charrière proposes a story and an interpretation of the story. One may ask what gives the mother the authority to condemn William's narrative? Why did Charrière put the mother in a

position of rhetorical authority since the mother is judging William on the basis of his narrative?

We would say that it is on the ground of her own narrative which precedes the narrative of William, that the mother judges William. Because in Lettres de Lausanne, the mother recounts her own story first; by the time the reader gets to the judgment of the mother he/she knows on what grounds she is condemning William. In order to see what is the education that Charrière envisions, one has to invert the order of the sequence of reading. Since as a reader one may desire to be convinced by both the story of William and the story of the mother, Charrière clearly differentiates between making sense of the argument of the novel and reading the novel.

Inverting the reading of the narration, we will first examine what the mother considers to be the failing of an education in the story of Caliste. Since in the mother's opinion, education falters and leaves a tragic end for Caliste. However, the mother does not condemn William's narrative without proposing some positive vision of education, that she develops in the first part. Her judgment is not a purely negative judgment.

In Caliste William recounts the story of his beloved Caliste, who appears only in the representation he gives of her since she is dead. Unlike the narrator of the epistolary novel tied to the present of the correspondence, the narrator of the memoir-novel can lose himself in the world of his past and give it any form he wishes. William announces: "Mon histoire est romanesque, madame, autant que triste, et vous allez être désagréablement surprise en voyant des circonstances à peine vraisemblables ne produire qu'un homme ordinaire" (VIII, 189). William describes his story as

romanesque which in French can be understood as fabulous adventures, extraordinary encounters: in a nutshell the world of fictions. The adjective romanesque is here emphasizes the fact that William's story is linked to the world of romances and should be read in terms of its archetypes, its conventional structures, its imitation of conventions.²⁷ William himself insists that the experiences he went through in life which he defines as "scarcely verisimilar" produced only a conventional man. As William begins his story, he suddenly says to the mother: "Vous êtes étonnée peut-être, madame, de l'exactitude de ma mémoire ou peut-être me soupçonneriez-vous de suppléer et d'embellir" (VIII, 194). Unlike the mother, William does not reflect on what he narrates, he merely presents the history of the events in his life. William's remarks prefacing his story are also a wry remark from Charrière since it points to the disparity between the extraordinary events and quality of the experience and the conventional nature of his narrative. This disparity is also a problem embedded in the convention of the genre of the memoir novel as the critics of the time did not miss to underline²⁸.

²⁷Kate Hamburger, Logique des genres littéraires, trans. Pierre Cadiot, (Paris: Editions du Seuil, 1986).

²⁸In Correspondance littéraire de Grimm, one can read "Le premier volume des Lettres de Lausanne offre plusieurs peintures de moeurs et de caractères, où l'on trouve beaucoup de finesse et de vérité, mais dont les détails sont minutieux et de mauvais goût. L'histoire de Caliste nous a paru d'un ton fort supérieur; quoique ce soit le roman d'une fille entretenue, elle n'a rien dont le sentiment le plus pur puisse être blessé ..." (VIII, 133). As for Cécile, Jean-François de la Harpe notes: "Dans la première partie [des Lettres de Lausanne] ce sont les amours d'une jeune fille de Lausanne et d'un jeune Anglais qui commencent par promettre cet intérêt toujours attaché aux amours de cet âge, et qui finissent par être insipides et ne rien produire du tout: c'est une conception avortée" (VIII, 134). Caliste seems to convince readers of the time as she is presented as both dangerous and exemplary: "Il peut être dangereux de présenter des caractères aussi

William's romanesque story is a sad one. Rather than exposing an historical truth,

William resorts to the narrative for the sake of distraction²⁹: "Il est vrai que je suis fort triste. Je suis si éloigné de vous savoir mauvais gré de votre question, que j'avais déjà résolu de vous faire mon histoire : mais je l'écrirai: ce sera une sorte d'occupation et de distraction, et la seule dont je sois susceptible" (VIII, 189). To entertain the mother, William begins with the story of his birth which recalls the tragic description of one of the famous birth of the century : Rousseau's, as recounted in the Confessions³⁰:

Un frère que j' avais et moi naquîmes presque en même temps, et notre naissance donna la mort à ma mère. L'extrême affliction de mon père, et le trouble qui régna pendant quelques instants dans toutes notre maison fit confondre les deux enfants qui venaient de naître. (VIII, 190)

séduisants [sic] que celui de Caliste, parce qu'il est à craindre que tout jeune homme ne voie une Caliste dans la comédienne dont il serait amoureux" (VIII, 133). Germaine de Stael was quoted as saying: "c'est dans la vie d'une femme qui aime que peut se trouver la vraie délicatesse, le désintéressement et l'héroïsme et qui sut aimer comme Caliste?" (VIII, 132).

²⁹In "Les Lettres écrites de Lausanne de Mme de Charrière. Inhibition psychologique et interdit social," in: Roman et Lumière au XVIIIème siècle, (Paris: Editions sociales, 1970), Jean Starobinski sees in the story of Caliste a "version dramatisée" of Cécile's life.(p. 133.) In Revealing Differences, Jenene Allison states: "The conflation of physical and emotional violence against women may serve to assess Charrière's innovation: by structuring Lettres de Lausanne along the lines of a novel that begins with, and then abandons the feminized discourse of the monologic epistolary novel, she liberates woman's voice from a destructive literary convention. (65).

³⁰Jean-Jacques Rousseau.Oeuvres complètes.La Pléiade, vol. 1, (Paris: Gallimard, 1959), 7. All subsequent quotes from Les Confessions will refer to this edition and will be cited in the text. "Je fus le triste fruit de ce retour. Dix mois après, je naquis infirme et malade; je coûtai la vie à ma mère, et ma naissance fut le premier de mes malheurs" (42). Rousseau claims to be of an exceptional exemplary nature: "je forme une entreprise qui n'eut jamais d'exemple et dont l'exécution n'aura point d'imitateur. Je veux montrer à mes semblables un homme dans toute la vérité de la nature; et cet homme ce sera moi"(43).

Unlike Rousseau who was a unique child. William has a twin brother whom he loves dearly and from whom he cannot dissociate himself. He evokes their relationship with the same effusion used to describe the friendship of Castor and Pollux in the Iliad or David and Jonathan in the Bible. William's relation to his brother structures the plot in which the narrator William is supposed to become a social individual at the end of the novel. In the course of the novel, William is expected to leave the intimate sphere of the home, to find a wife and to play a productive and reproductive role in society. But William fails, as he cannot separate himself from his brother:

Nous nous ressemblions pour la figure et pour l'humeur, nos goûts étaient les mêmes, nos occupations nous étaient communes ainsi que nos jeux; l'un ne faisait rien sans l'autre, et l'amitié entre nous était plutôt de notre nature que de notre choix, de sorte qu'à peine nous nous en apercevions; c'étaient les autres qui en parlaient et nous ne la reconnûmes bien que quand il fut question de nous séparer. (VIII, 190)

William's love for his brother disrupts the traditional scenario of marriage as William fails to overcome his exclusive feelings for his brother. In his incestuous relation to his brother, we can see once again William recycling an archetype of romances.³¹ And William's love which he claims comes from "his nature" tells us more about William's obsessive relation to conventions than about William's nature. His archetypal vision of fraternity which borders on incest blurs the boundaries between the world of fictions

³¹Northrop Frye, The Secular Scripture. A Study of the Structure of Romance, (Cambridge, Massachusetts; London, England: Harvard University Press, 1976), p. 44.

and the world of his reality.³² Thus, it is not surprising that his love for his brother found expression in a tone of sublime aggrandizement of the most heroic and mythic originary friendships described in the Iliad and the Bible:

Mon frère fut destiné à avoir une place dans le parlement, et moi à servir dans l'armée : on voulut l'envoyer à Oxford, et me mettre en pension chez un ingénieur: mais le moment de la séparation venu, notre tristesse et nos prières obtinrent que je le suivrais à l'université, et j'y partageai toutes ses études et lui les miennes. J'appris avec lui le droit et l'histoire, et il apprit avec moi les mathématiques et le génie; nous aimions tous deux la littérature et les beaux-arts. Ce fut alors que nous appreciâmes avec enthousiasme le sentiment qui nous liait: et si cet enthousiasme ne rendit pas notre amitié plus tendre, il la rendit plus productive d'actions, de sentiments, de pensées; de sorte qu'en étant plus occupés, nous en jouissions davantage. Castor et Pollux, Oreste et Pilade, Achille et Patrocle, Nisus et Euryale, David et Jonathan furent nos héros. (VIII, 190)

William's model of friendship and love is one of heroic and mythic dimension.

Moreover his love for his brother leads him to envision a family based on their union

Il se promet de n'avoir rien qu'en commun avec moi, de ne se point marier si je me mariais. Je me fis et à lui la même promesse: de sorte que n'ayant qu'une famille entre nous deux, ne pouvant avoir que les mêmes héritiers, jamais la loi n'aurait eu à décider sur nos droits ou nos prétentions. (VIII, 190)

Both of the brothers promise each other that if one of them gets married, the other will not in order to avoid the sharing of the patrimony. By promising each other not to get married, they relegate marriage to the secondary role with respect to their union. The alliance of the brothers becomes an ideal contract. However this ideal contract will not survive. As William's story follows the conventions of romances, William's

³²For an analysis of the theme of incest in Lettres de Lausanne, see Jean Starobinski, "Les Lettres écrites de Lausanne de Mme de Charrière. Inhibition psychologique et interdit social," pp. 130-151.

predictable world anticipates the arrival of a demonic world, a world of anxiety and nightmare that the death of his brother is ushering in. William's brother is killed, when both brothers are sent to fight against the Americans in the War of Independence. The pain William feels with the death of his brother temporarily paralyzes him:

Je ne me souviens pas distinctement de ce qui se passa dans le temps qui suivit sa mort. Je me retrouvai en Angleterre: on me mena à Bristol et à Bath. J'étais une ombre errante, et j'attirais des regards de surprise et de compassion sur cette pauvre, inutile moitié d'existence qui me restait. (VIII, 191)

While mourning the loss of his brother, William encounters Caliste. As William speaks of his love for his dead brother, deep feelings are awakened in Caliste. Her love takes roots in her admiration for William's powerful attachment for his brother:

Qu'il était heureux! s'écria-t-elle un jour que le coeur plein de mon frère, j'en avais longtemps parlé; heureuse la femme qui remplacera ce frère chéri! Et qui m'aimerait comme il m'aimait, lui- dis-je. Ce n'est pas cela qu'il serait difficile de trouver, me répondit-elle en rougissant. (VIII, 195)

Fascinated by the love for the brother, Caliste dreams of replacing him. Responding to her desire, William stipulates that if a woman were to love him she would have to love him the way his brother loved him. What is left to Caliste, if she wants to seduce William is to identify with the dead brother. Little by little, Caliste begins to occupy the same place in William's narrative as the brother did before. As Caliste nurtures William back to health, the latter goes as far as requiring his brother's blessings: "O mon frère! mon frère! Que diriez-vous? m'écriais-je quelque fois; mais je ne vous ai plus, et qui était plus digne qu'elle de vous remplacer" (VIII, 195). The tragic story of the brothers repeats itself, as William recounts his love for Caliste to Cécile's mother. He is no more able to distinguish between himself and Caliste than he was between himself and his

brother. The idyllic brotherly bond is now replaced by an equally idyllic sisterly one.

William's desire for knowledge is just as mimetic as his desire for his brother was. In the former case, the expression of his sentiment, if not the sentiment itself was borrowed from the Iliad and the Bible. When it comes to educating himself, William needs the precedent of William Pitt, earl of Chatham and as if that was not enough, he adds a secondary mimetic circuit namely Caliste who will reassure him of the reality of his knowledge:

Je définissais l'éloquence, le pouvoir d'entraîner quand on ne peut pas convaincre, et ce pouvoir me paraissait nécessaire avec tant de gens et dans tant d'occasions, que je crus ne pouvoir pas me donner trop de peine pour l'acquérir. A l'exemple du fameux Lord Chatham, je me mis à traduire Cicéron, et surtout Démosthène, brûlant ma traduction et la recommençant mille fois. Caliste m'aidait à trouver les mots et les tournures bien qu'elle n'entendit ni le grec ni le latin: mais après lui avoir traduit littéralement mon auteur, je lui voyais saisir sa pensée souvent beaucoup mieux que moi, et quand je traduisais Pascal ou Bossuet, elle m'était d'un plus grand secours. Ensuite, je lui lisais les nouveautés qui avaient quelque réputation, ou quand rien de nouveau n'excitait notre curiosité, je lui lisais Rousseau, Voltaire, Fénelon, Buffon, tout ce que votre langue a de meilleur et de plus agréable. (VIII, 197-98)

When reading Pascal or Bossuet, William realizes he understands these authors only once Caliste who does not know French, explains their thoughts to him. Caliste acts as William's mirror when not knowing the language, she merely confirms his judgment. The pseudo-dialogic structure of their literary exchange works as an echo. Ensnared in their projections of each other, they decide to get married and send a letter to William's father to ask him for his permission, but the father refuses since Caliste has lived before as a courtesan. Concerned with his lineage, the father blocks their union:

Mais aussitôt que je vous entendrai nommer comme j'entendais nommer ma femme, ma mère, pardonnez ma sincérité, madame, mon coeur se tournerait

contre vous. et je vous haïrais peut-être d'avoir été si aimable que mon fils n'eût voulu aimer et épouser que vous: Et si dans ce moment je croyais voir quelqu'un parler de mon fils ou de ses enfants, je supposerais qu'on dit: C' est le mari d'une telle. ce sont les enfants d'une telle. En vérité, madame cela serait insupportable. car à présent que l'idée n'a rien de réel, l'idée m'en est insupportable. (VIII. 202)

William does not disobey his father's orders and does not marry Caliste. Caliste saddened by William's choice and depressed marries someone else. leaves the city for the countryside where she dies during a musical performance of Stabat Mater.

Saddened by the story the mother exclaims in her final letter: "Que faites-vous malheureux homme. Vivez-vous?" (VIII, 239). The conventional character William is called back to life with the question "vivez-vous?" By marking a distinction between a pattern of life and other forms of representation, the mother makes William aware that he had confused patterns of life with a fictional pattern. Such a confusion resulted in the fiction taking over William's life. Making her point as usual at the end of her story, Charrière has the mother conclude:

Vous m'avez fait à ce que [sic] je sentirais et vous m'avez fait figurer à moi-même. mère, veuve de la plus aimable des filles, et quand j'ai frêmi quand j'ai imaginé autour de moi le monde tel qu'il serait vide désert et mort, je pense voila ce qu'il sent, voila ce que sont les objets pour lui, mais alors je regarde Cécile, je la touche, je me pénètre du plaisir de savoir qu'elle existe et vous, et vous, et vous? . . . pauvre, malheureux homme. Que ne puis-je par quelque consolation, quelque distraction vous payer le bien que vous m'avez fait de me rendre encore plus attentive à me la conserver. (VIII, 239)

William's story taught the mother to be even more attentive to her daughter. But it is because she exposed her principles of education in the first part that she allows herself to make such a comment on William's life and on her own love for her daughter.

The dedication of Lettres de Lausanne describes the letters as a mixture of

passion and reason, of weaknesses and virtues common in society. Charrière opposes this mixture to what the writer could have chosen to write about, namely, pure virtue. Thus, the first part of Lettres de Lausanne indicates a desire to escape the world of moral fictions with its simplified moral facts and to come closer to a depiction of the often inconsistent social world:

A madame de S... [sic]
 Madame si au lieu d'un mélange de passion & de raison, de faiblesse & de vertu, tel qu'on le trouve ordinairement dans la Société, ces lettres ne peignaient que des vertus pures telles qu'on les voit en vous, l'éditeur eût osé les parer de votre nom & vous en faire hautement l'hommage. (VIII, 136)

In the quote above, Charrière indicates that "pure virtue" is embodied in the Marquise de S. Thus "pure virtue" is not to be understood as concept but presented as example, as they can be seen in the Marquise de S. For Charrière, the moral discourse that links women and virtue in most conduct books and novels of the time does not get out of the grid of conventional understanding of virtue. And in her very first letter, the mother denounces an example of feminine virtue as "wordy." The scandal of examples of virtue, says the mother, consists in attributing to discursive examples a regulatory function in social relations:

Une femme de votre mérite, sage sans pruderie, également sincère et polie, modeste quoique remplie de talents. Mais voyons si cela est bien vrai. J'ai toujours trouvé que cette sorte de mérite n'existe que sur le papier, où les mots ne se battent jamais, quelque contradiction qu'il y ait entre eux. (VIII, 137)

The definition of a virtuous woman proposed by the mother is characterized by an antithetical relation ("polite but sincere, chaste but without being a prude,") that borders on the oxymoronic. The mother declares that she wants to examine the truth of a

"femme de mérite." but immediately notices that the authoritative value of this representation is only contained in language.³³ Thus discussion of the example itself must take into account that first and foremost the example is only a statement. The insistence on the wording of the example reveals Charrière's preoccupation with the pre-constitution of the example:

Sincère et polie! Vous n'êtes pas aussi sincère qu'il serait possible de l'être parceque vous êtes polie; ni parfaitement polie, parceque vous êtes sincère; et vous n'êtes l'un et l'autre que parceque vous êtes médiocrement l'un et l'autre. En voilà assez: ce n'est pas sur vous que j'épilogue: J'avais besoin de me dégonfler sur ce chapitre. (VIII, 137)

In the above quote, it becomes clear that a representation of exemplary virtue in Charrière's Lettres de Lausanne will not take the form of a simple illustration of virtuous conduct but of argumentation (j'épilogue), thus undermining the presupposition that examples can be easily identified and communicated.

The mother tells her correspondent about her daughter's education her tutors exposed her to in order that she receive a virtuous education. The goal of Cécile's education was to learn to please society without caring to please it. They also insisted that Cécile should be frank and reserved at the same time:

Voilà comme, avec des mots qui se laissent mettre à côté les uns des autres, on fabrique des caractères, des législations, des éducations et des bonheurs domestiques impossibles. Avec cela on tourmente les femmes, les mères, les jeunes filles, tous les imbéciles qui se laissent moraliser. (VIII, 138)

In the quote above, the mother condemns the linguistic functioning and regulative

³³In the quoted article (p.5), Alexander Gelley remarks that in both the classical and the Christian traditions, the authority of examples was predicated on their truth, whether this was understood in a transcendent or a factual-historical sense (and of course the two were often interwoven).

enforcement of virtue. An example of virtuous behavior becomes a regulative imperative that is set to torment women in particular. This mechanical regulation, that relies on often contradictory words put side by side, becomes social reality when the linguistically fabricated norms of conduct become ideal forms of life. Once the mechanisms of enforcement are set into motion, the words at their origin are immediately forgotten. Refusing to represent exemplary nature, the mother announces: "Mais songez que ma fille et moi ne sommes pas un roman comme Adèle et sa mère, ni une leçon, ni un exemple à citer" (VIII, 149). The mother in Charrière's story is not interested in citing her daughter as a model for emulation. Instead she says: "J'aimai ma fille uniquement" (VIII, 149). Charrière shifts from a representation of morals which concentrates on normative exemplarity to a representation of morals that exemplifies the love of the mother for her daughter. In order to illustrate her statement, the mother makes a direct reference which opposes her conception of education to the one of Madame de Genlis as exposed in Adèle et Théodore, ou Lettres sur l'éducation (1782)³⁴. In the novel, Genlis endorses Rousseau's opinions in Emile ou de l'Education (1762)

³⁴Genlis, Stéphanie, Félicité Ducrest de Saint Aubin. Adèle et Théodore; ou Lettres sur l'éducation. (Paris: Marandan, an XIII, 1804). This work sets out theories on the pedagogical merits of an experimental education up to the age of twelve, carried out in a rural and domestic setting. The chief correspondent is the Baronne d'Almane, a mother who with her husband resolves to remove the family to an isolated country Château in order to devote four years to the education of their children: Adèle et Théodore. The premise of Adèle is based on an opposition between society and individuals. But as the children are isolated in a rural context, the society the mother talks about is the imaginary society she is depicting and the opposition she is setting is between her individuals children and her imagined society. Thus, the exemplary conduct Adèle and Théodore should learn, can only be operative within the imagined society of their mother.

and agrees with each one of his precepts: on the importance of the pastoral life: of making education suitable to the age and temperament of the child: of maintaining a close relationship between teacher and pupil and, above all, of the power of the pedagogical example. The influence of the mother as teacher and moral guide is foregrounded in Adèle as well as the authority of the teacher was foregrounded in Emile. In Genlis' educational treatise the portrayal of the children is restricted to the author's external viewpoint. In short, this educational treatise instructed parents on how to inculcate their children into following a set of rules of conduct. In her correspondence, Charrière's comment on Genlis's book is far from flattering: "J'aime mieux celà pourtant qu'un livre qui m'est arrivé hier en même temps que les fables. Il est de Me de Genlis & si moral, si endoctrinant, d'un style si sec! Cette femme n'est jamais qu'une maitresse d'école"(V, 535).

In most of her novels as well as her correspondence, Charrière's approach to pedagogical issues denounces an education which would consist solely in regulating or correcting the child for the sake of his "nature". In Briefwechsel zwischen der Herzogin von *** und der Fürstin von ***, ihrer Tochter³⁵, Charrière writes the story of a princess who wants to give a moral education to her daughter, at the hand of a German tutor who is illiterate. The Princess assumes that people have an innate moral sense that only a "natural" education would bring to the surface. But what a natural education means is not stated clearly. The grand-mother is offended by her daughter's decision concerning the grand daughter's education and asks her daughter to choose instead the

³⁵Isabelle de Charrière, (IX, 481-498).

sophisticated, educated and worldly French tutor:

Schweigen könnte man zur Noth; aber dazu entschliessen sich die Weiber nicht leicht, und sprechen sie nicht gut, so sprechen sie schlecht, haben sie nichts Interessantes oder Angenehmes zu sagen, so klatschen und lästern sie [...] Dein Kind wird dir Langweile machen, meine Tochter: Das wird ihr erstes Unrecht oder Unglück seyn. (IX, 485)³⁶

The grandmother makes it clear that a natural education will not guarantee that her grand-daughter will know “intuitively” when to speak or when to stay silent. In fact, not to learn to read or write or speak means that the grand daughter will speak without judgment (“à tort et à travers”) since neither silence nor speech belong “naturally” to one’s own nature. This insistence on learning how to speak is at the center of Charrière’s pedagogical preoccupations. From Charrière’s point of view, since language is a defining characteristic of human society, an educator must teach their students how and when to speak. The grand mother reflects the Philosophes’ preoccupation with language present in such treatises as Rousseau’s Essai sur l’origine des langues and Discours sur l’origine et les fondements de l’inégalité parmi les hommes as well as Diderot’s Lettres sur les sourds et les muets and Lettres sur les aveugles. However, Charrière does not go into philosophical speculation about how men acquired the faculty of speech and how once able to speak, they came to make use of it. For both the grandmother of the Briefe as well as the mother of Lettres de Lausanne, language is not a simple instrument for expressing thoughts but rather the faculty of the human mind

³⁶“One can keep silent if necessary. But women can not easily resolve to keep silent. If they do not speak well, they speak poorly; if they have nothing interesting or agreeable to say, then they engage in gossip and slander [...] Your child will bore you, my daughter and this will be her first injustice or misfortune.”

that forms concepts and manipulates them. Thus language is the most crucial element of education. Like the grandmother of Briefe, Cécile's mother attaches primary importance to learning languages. Cécile's education concentrates on learning to read and write: "J'ai enseigné à lire et à écrire à ma fille dès qu'elle a pu prononcer et remuer les doigts: pensant, comme l'auteur de Sethos, que nous ne savons bien que ce que nous avons appris machinalement" (VIII, 148). According to her mother's plan, at first Cécile will learn languages mechanically, since reading and writing has to become second nature for Cécile. The correspondent objects to the mother's attitude which she perceives as dangerous, since reading and writing could corrupt the good nature of the child: "N'y avait-il pas d'inconvénient, me dites-vous à laisser lire, à laisser écouter? J'abrège; je ne transcris pas toutes vos phrases, parcequ'elles m'ont fait de la peine" (VIII, 149). If the mother controls what Cécile reads or listens to, Cécile would only internalize a regulative attitude and listening and would not develop a reflexive judgment. The mother refuses to control Cécile's habits of reading. She points to the contradiction present in pedagogical treatises of the time. Most of them argue for strict supervision of the child in order to produce an autonomous individual whose character, nevertheless remains predetermined by the pedagogue. In the case of Adèle, education is reduced to a simple exposition of didactic norms³⁷ of conduct that a young girl should

³⁷ Adrian P.L. Kempton, "Education and the Child in Eighteenth-Century French Fiction," Studies on Voltaire and the Eighteenth Century, vol.124 (Oxford, 1974, pp. 299-362). Kempton notices that many novels about children (whether Rousseau in Emile or madame de Genlis in Adèle et Théodore written after 1750 are concerned with the development of theories about education rather than exploration of children's characters. The children are given hardly any physical or emotional or intellectual description and are used as metaphors of innocence and

internalize.

In the case of Cécile, the mother proudly claims that her daughter is unique. Cécile is not only a child to be taught, but also an individual brought up to be distinguished in society as well as to be able to distinguish. For Charrière, Cécile becomes the vehicle for a personal and innovative expression of what education should be.

Unlike Madame de Genlis's Adèle and Rousseau's Emile, Cécile is not educated in a remote world from which one day she will return to society. Cécile lives with her mother in town. Because they are poor, mother and daughter have to rent rooms to travelers and passers-by. Thus their domesticity is permeated with public life from the start. In this hybrid private-public world mother and daughter receive people and go out to pay visits to friends, acquaintances and relatives. At one of the receptions where mother and daughter are present, the assembly decides to play writing games:

On mêle les cartes, chacun en tire une au hasard, et écrit une réponse sous la question, on remêle, on écrit jusqu'à ce que les cartes soient remplies. Ce fut moi qu'on chargea de lire. Il y avait des choses fort plates, et d'autres fort jolies. Il faut vous dire qu'on barbouille et griffonne de manière à rendre l'écriture méconnaissable. Sur une des cartes on avait écrit: A qui doit-on sa première éducation? A sa nourrice, était la réponse. Sous la réponse, on avait écrit: Et la seconde? Réponse: Au hasard. Et la troisième? A l'amour.- C'est vous qui avez écrit cela, me dit quelqu'un de la compagnie.-je consens, dis-je qu'on le croie, car cela est joli. (VIII, 157)

In the quote above, Charrière distances herself from the treatises on education by embedding the question of education within a social game. In the course of the game, education circulates anonymously on paper amongst the people present at the gathering.

simplicity.

The game parodies the genre of pedagogical treatises, which rely on a triple model of authority: the authority of the tutor over the pupil, that of the author of the treatise over the tutor; and that of the ideal example over the particular case. The game undermines this system of authority by circulating written messages anonymously. In choosing the word nourrice, the assembly emphasized a period of childhood based on bodily needs. Hasard multiplies references, points of view, situations underlying the need for understanding, imagination and senses. No norms of conduct are enunciated in order to be enforced. But amour³⁸ has given rise to countless fictions, presented as regulations for the moral conduct of women. The mother admits putting the word “amour” in circulation. But her comment is ambiguous: “C’est joli.” Does she mean that love is beautiful or that the word “love” is beautiful? Unlike the mother, the audience does register this ambiguity, and ignoring the mother’s comment, immediately links the word love to women and virtuous conduct. With their comments, they show that they understand love to be beautiful, moral and feminine at the same time. Confronted with such an ideological understanding of love, the mother decides to explain to her daughter that the word “amour” is conceptualized along the line of gender and acquaints her daughter with the stereotypes that follow this line of division: “un homme cherche à inspirer, pour lui seul, à chaque femme un sentiment qu’il n’a le plus souvent que pour l’espèce. Il arrive aussi à des femmes de s’occuper beaucoup d’un homme qui s’occupe

³⁸For the importance of regulations concerning desire and love in the 18th century, see: Philip Stewart, Le masque et la parole. Le langage de l’amour au XVIIIe siècle, (Paris: Librairie José Corti, 1973). Pierre Saint-Amant, Séduire ou la passion des Lumières, (Paris: Klincksieck, 1987). Kamuf, Peggy, Fictions of Feminine Desire, (Lincoln : U of Nebraska P, 1982).

peu d'elles" (VIII. 160). In what follows the mother pursues the stories of gender relations and proceeds to show her daughter that gender relations are often the production of narrative strategies. But if the rhetorical strategies have been forgotten, the examples of gender relation have become a knowledge that serves as exemplary for society. In the case of virtue, virtuous conduct has become a regulatory and obligatory practice:

Cécile. dans vos leçons de religion on vous a dit qu'il fallait être chaste et pure : Aviez-vous attaché quelque sens à ces mots?-Non, maman.-Eh bien! le moment est venu de pratiquer une vertu, de vous abstenir d'un vice dont vous ne pouviez avoir aucune idée. Si cette vertu vient à vous paraître difficile, pensez aussi que c'est la seule que vous ayez à vous prescrire rigoureusement, à pratiquer avec vigilance, avec une attention scrupuleuse sur vous-même.-La seule!- Examinez-vous, et lisez le Décalogue. Aurez-vous besoin de veiller sur vous pour ne pas tuer, pour ne pas dérober, pour ne pas calomnier? Vous ne vous êtes sûrement jamais souvenue que tout cela vous fût défendu. Vous n'aurez pas besoin de vous en souvenir; et si vous avez jamais du penchant à convoiter quelque chose, ce sera aussi l'amant ou le mari d'une autre femme, ou bien les avantages qui peuvent donner à une autre le mari ou l'amant que vous désireriez pour vous. Ce qu'on appelle vertu chez les femmes sera presque la seule que vous puissiez ne pas avoir, la seule que vous pratiquiez en tant que vertu, et la seule dont vous puissiez dire en la pratiquant : J'obéis aux préceptes qu'on m'a dit être les loix de Dieu, et que j'ai reçues comme telles. (VIII, 160)

The mother's first question to the daughter (if she had attached some meaning to the word "chaste et pure") is followed by the injunction that virtue cannot be understood as a sign but only as a practice of restraint, control and renunciation. Continuing to think in terms of gender division, Cécile questions the mother on the inequality involved in regulating one's comportment as it appears to be expected only from women:

- Mais Maman, les hommes n'ont-ils pas reçu les mêmes lois? pourquoi se permettent-ils d'y manquer et de nous en rendre l'observation si difficile?-Je ne saurais trop, Cécile, que vous répondre ; mais cela ne nous regarde pas. Je n'ai point de fils; je ne sais ce que je dirais à mon fils. Je n'ai pensé qu'à la fille que j'ai et que j'aime par dessus toute chose. Ce que je puis vous dire c'est que la

société. qui dispense les hommes et ne dispense pas les femmes d'une loi que la religion paraît avoir donnée également à tous. impose aux hommes d'autres lois qui ne sont peut-être pas d'une observation plus facile. (VIII, 161)

The answer of the mother is quite innovative as she discards a discussion either of the concept of virtue itself or of the agents submitted to its regulation. Society, she insists, needs regulation. As a consequence, both women and men are submitted to rules. However, these rules are invented by society itself. In the social world, these regulations do not fit a general pattern of equal measures since society is characterized precisely by its diversity. However, these regulations can still be thought as poorly imagined fictions (since these characters are too predictable):

s' ils oublient ces lois. ils [les hommes] sont déshonorés. on les fuit, on craint leur approche, ils trouvent partout un accueil qui leur dit : On vous avait donné assez de privilèges, vous ne vous en êtes pas contentés; la société effraiera, par votre exemple, ceux qui seraient tentés de vous imiter, et qui, en vous imitant troubleraient tout, renverseraient tout, ôteraient du monde toute sécurité, toute confiance. Et ces hommes plus rigoureusement punis que ne le sont jamais les femmes n'ont été coupables bien souvent que d'imprudence, de faiblesse ou d'un moment de frénésie; car les vicieux déterminés, les véritables méchants sont aussi rares que les hommes parfaits et les femmes parfaites. On ne voit guère tout cela que dans les fictions mal imaginées. Je ne trouve pas je le répète, que la condition des hommes soit, même à cet égard, si extrêmement différente de celle des femmes. (VIII, 162)

An apparently simple binary system in which regulations are classified within a differential grid of men and women is not enough to give a key to the morals of society as the mother continues her lesson. In the world of fictions, these regulations reign since the characters followed the logic of these rules. In opposition to novelistic examples the mother proceeds to give historical examples:

Vous avez entendu louer, et peut-être avait-on tort de les louer en votre présence des femmes connues par leurs mauvaises moeurs; mais c'étaient des femmes qui

n'auraient pu faire ce qu'on admire en elles si elles avaient été sages. La Le Couvreur n'aurait pu envoyer au Maréchal de Saxe le prix de ses diamants si on ne les lui avaient pas donnés...Agnès Sorel n'aurait pas sauvé la France. si elle n'avait été la Maitresse de Charles VII.(VIII. 164)

The mother does not so much emphasize the relation between the historical and the ideal as the gap, the disjunction between the ideal of virtue which should regulate the life of women and make them exemplary and the exemplarity of historical women who became exemplary precisely for their lack of virtue. The mother names Le Couvreur and Agnes Sorel and tells her daughter that their being courtesans does not take anything away from what they did to save France. The mother contrasts these glamorous examples with the Roman matrons, often cited as historical examples of chastity. This history is so deeply ingrained in people's mind that one would express moral outrage if history were to be divorced from the myth it gave rise to, claims the mother:

Mais ne serions-nous pas fâchées d'apprendre que la mère des Gracques, femme d'Antoine, ou Porcie, fille de Caton avait eu des amants? Mon érudition fit rire Cécile.- On voit bien Maman, dit-elle que vous avez pensé d'avance à ce que vous venez de dire et qu'il vous a fallu remonter bien haut...- Il est vrai, interrompis-je que je n'ai rien trouvé dans l'histoire moderne; (VIII, 164)

Charrière calls attention to the construct of the reference (virtuous women) and its framing (history of virtue) as well as its interpretation and regulation. She contrasts two types of examples, the "public," historical examples of particular women (Le Couvreur and Agnès Sorel) and the "private," general examples of "la mère," "la fille," "la femme". As historical examples, Le Couvreur and Sorel are not repeatable. In contrast, the exemplarity of "la mère des Gracques," "la femme d'Antoine" or "la fille de Caton" correspond to the reader's expectations of "womanly" ideals. The daughter remarks that

her mother had to go way back to Roman times thus “eliding” the tales of virtuous women in the present. Indeed, the mother did not recount conventional practice of virtuous behavior, but made her daughter aware of the discrepancy between practical regulations of virtue which reveal themselves as fiction and virtue as a concept that could have another signification as was the case with Le Couvreur and Agnès Sorel. Having set an opposition between examples as illustration of an ideology and historical examples that contradict the demands for “fictional” virtue, the mother taught her daughter that examples never fit. The historical cases of Le Couvreur or Agnes Sorel are liminal cases from which no teaching can be drawn. The daughter is taught that neither historical examples of virtue nor fictional ones (since they belong to the predictable world of rhetoric) can serve as models for her conduct. However, the mother’s reflections gave a cast for the daughters’s own reflections on moral issues. After the mother finishes her discourse, it is the turn of the daughter to expose her mother to her understanding of morals. One evening with her mother out of the room, Cécile helps her cousin, who just happens to have cut himself, to bandage his bloody finger. When she finds herself trapped in his embrace, she does not react. When the mother returns to the room, the cousin stands up and leaves:

Mais, Maman, disait-elle , comment n'ais-je pas eu la pensée de me jeter de côté, de détourner sa tête? J'avais deux mains, il n'en avait qu'une. Je n'ai pas fait le moindre effort pour me dégager du bras qui tenait ma taille et qui me tirait.... N'est-il pas affreux de pouvoir perdre le jugement au moment où l'on en aurait le plus de besoin? Je ne répondais rien. Craignant également de graver dans son imagination d'une manière trop fâcheuse une chose qui lui faisait tant de peine, et de la lui faire envisager comme un événement commun, ordinaire et auquel il ne fallait point mettre d'importance, je n'osai parler. Je n'osai même exprimer mon indignation contre M. de ***. Je ne disai rien du tout. (VIII, 167)

While the man tried to embrace Cécile, she noticed that at the precise moment of the action she was deprived of a capacity for judgment and asks her mother to explain this sudden paralysis. Instead of following the conventional scenario of indignant virtue that the cousin's behavior warrants, the mother lets the daughter to make sense of the event on her own. The mother's reaction is quite astonishing as she fears engraving the memory of a painful event on her daughter's imagination but at the same time she does not want her to overlook the pain of that event. The mother realizes that she has the power either to print an indelible maxim on her daughter's mind or to obliterate an action that is condemnable by the normative rules of virtuous conduct. She refuses to provide her daughter with a prescriptive frame for conduct and stays silent. Cécile will have to supply the gesture's silent context herself and will have to provide her own fiction as interpretation of her own behavior. As her cousin comes back to apologize, Cécile asks her mother to let her speak: "Cécile m'a demandé la permission de répondre. J'ai dit que je souscrivais d'avance à tout ce qu'elle dirait.- Je vous pardonne, monsieur a-t-elle dit et je prie ma mère de vous pardonner." (VIII, 168). From now on, Cécile delivers her own narrative and interpretation to which the mother lends her approval "je souscrivais d'avance a tout ce qu'elle dirait".

Charrière's Lettres de Lausanne which insisted on the importance of learning how to interpret can also be seen, as I suggested earlier, an example of interpretation of one of the most well-known literary accounts of mother and daughter relation: La Fayette's La Princesse de Clève. Cécile, like la Princesse de Clèves, is taught about the world of society, and like the Princesse, Cécile will confess the love she feels for

someone. But in Lettres de Lausanne, the scene of confession is submitted to an important rearrangement. If in La Princesse de Clèves, the hierarchical order in the family stays in place, and the daughter does not divert from the norms of conduct established by the mother, in Lettres de Lausanne, the mother yields the right of interpretation to the daughter and even agrees “to cosign” the narrative of the daughter. In La Princesse de Clèves it is ultimately the mother who controls the conduct of the daughter, hence her narrative. In the case of Cécile, the confession of love is only an indication for the mother of her daughter’s desire which she respects:

[P]uisque vous m’avez fait un aveu, je vous en ferai un aussi qui vous sera utile peut-être [...] j’ai aussi de la préférence pour quelqu’un.- Quoi, s’écria-t-il vous aimez! Cécile ne répondit pas. De ma vie je n’ai jamais été aussi émue. Je le croyais; mais le savoir! savoir qu’elle aime assez pour le dire et de cette manière! pour sentir que c’est un préservatif, que les autres hommes ne sont point à craindre pour elle. (VIII. 168)

The scene of confession in La Princesse de Clèves violated the law of bienséance and vérisimilitude and thereby unleashed a furious critical debate at the time.³⁹ What the critics insisted upon was the fact that such an act could never take place in society. In Lettres de Lausanne, the importance of the scene is not in the act of confessing but in the confession itself as both mother and daughter gain intimacy and knowledge of each other from the confession. The consequence of such remarks allows Charrière to rewrite

³⁹For the debate that arose at the time of the publication of the book on the “implausibility” of the “aveu” of the Princess, see Nancy K. Miller, Subject to Change: Reading Feminist Writing, (New York: Columbia University Press, 1988) and Gérard Genette, “Vraisemblance et motivation,” in Figures II, (Paris: Seuil, 1969). They both observe that the Princess’s actions appear implausible because they do not fit the maxims of her sociolect.

the scenario which thereby avoids the prescriptive ending reserved for heroines of love in male-authored fiction: death or solitude.⁴⁰ The words of the mother during the game that had associated love with morals and esthetics takes a fuller meaning. If love has been the possibility for mother and daughter to create a fiction as well as a commentary on a previous literary text, now, love can take on other forms of representation. With Charrière, love enters the domain of ethical interpretation and becomes a possibility for a representation of ethics.

As daughter and mother go on a trip, the daughter learns that an African servant who only speaks English is dying alone in a house nearby. He is taken care of by farmers who only speak French. Cécile who learned English with the English Milord she was in love with, immediately decides to find out if the dying servant needs help:

On m'a dit . maman, qu'il ne savait pas le français; qui sait si ces gens malgré toute leur bonne volonté devinent ses besoins? Nous y allâmes. Cécile lui dit les premiers mots d'anglais qu'elle eût jamais prononcés: Ce que l'amour avait fait acquérir, l'humanité en fit usage. Il parut les entendre avec quelque plaisir. Il ne souffrait pas mais il avait à peine quelque reste de vie ... Nous lui donnions tantôt un peu de vin, tantôt un peu de soupe. J'étais assise auprès de lui avec ma fille quand il expira. Nous restâmes longtemps sans changer de place. (VIII, 187)

In the quote above, we learn that the love Cécile carried for the English Lord was an incentive to learn English which reveals itself indispensable to help the dying servant.

⁴⁰In the Heroines's Text: Reading in the French and English novel, 1722-1782 (New York: Columbia University Press, 1988), Nancy K. Miller examines eight canonical novels that she sorts into two categories: "euphoric" plots, in which the female protagonist rises gloriously to "integration into society through marriage, and "dysphoric" plots, in which she falls tragically into the abyss of death or exile. "The heroine's text is plotted within this ideological delimited space of an either/or closure within the conventional rhetoric of the sociolect." (IX).

Her apprenticeship of language allows Cécile to communicate with the servant, unlike the Swiss peasants who because of their lack of language can only act on what they see. As usual with Charrière, the main point comes at the end when she writes that an ethical nature requires not only good will and good deeds but a possibility of communicating and interpreting someone else's state of mind. If good will cannot be translated and recognized as such by others it is of no avail: "Je ne suis, maman, ni riche, ni habile, je ne ferai jamais beaucoup de bien; mais puissé-je faire un peu de bien partout où le sort me conduira, assez pour que moi et les autres puissions croire que c'est un bien plutôt qu'un mal que j'y sois venue!" (VIII, 187). Moral nature is not to be found in the person's nature, nor in the good deeds themselves, but in the communal exchange based on language. In a chaotic society, human nature could not be deduced from moral rules or exemplary deeds: "On ne voit pas assez que, chez nous autres humains le revers de la médaille est de son essence aussi bien que le beau côté" (VIII, 188). Charrière is not interested in debating the possibility of an exemplary conduct conceived in an exposition of regulations, as was the case for the *Princesse de Clèves*. Exemplary conduct belongs to the domain of judgment, fiction and interpretation. Therefore, unlike the *Princesse*, both mother and daughter give primary importance to the words said as it is only through words that interpretation can take place.

Lettres de Lausanne is an important critical comment of Charrière on the "newness" of the literary language which was taking form in novels. Novels were seen as conveyor of social wisdom and insight brought in from outside of literature but captured by literature. Novels in Dorat or Sade or Rousseau's perspective became

valuable as stories of the society and were perceived as superior to romances where the story were told for the sake of the story. However, Charrière's novelistic examples question the relation of fiction to social reality. If Caliste's meaning can be grasped in her overdetermined reference to conventional type, Cécile has to be read in her contrast to Caliste. The consequence of such juxtaposition implies not only a warning for the reader as to what is there to read, but includes its own critic on a debate that was taking form : Novels are useful because they imitate life. In Lettres de Lausanne, it is therefore crucial to read for the conventions the story are reflecting, the mimetic structure of the novel, the repetitive devices of the theme as they are much more a commentary on how a judgment takes form, than the simple commentary on the resemblance between novel and life.

Chapter Two: Charrière and Rousseau: The Fictional Imperative: Novel as a Tool of Criticism

To speak about beauty and judgment of literature, Charrière chooses Rousseau's works. This choice is not surprising as by the end of the 18th century, the complete publication of Rousseau's Confessions had raised fundamental issues regarding art and representation. In the Confessions, Rousseau had proposed to "represent" a man, and had claimed to achieve what no one had done before him, that is, to set forth an artistic representation which at the same time contained the truth of what Rousseau the man was. Rousseau gave the illusion that there could be in writing a "truthful" correspondence between the subject represented and the representation of the subject:

Voici le seul portrait d'homme, peint exactement d'après nature et dans toute sa vérité, qui existe et qui probablement existera jamais. ... de première pièce de comparaison à l'étude des hommes qui certainement est encore à commencer⁴¹

Rousseau makes two important claims in his preface of the Confessions. One is that he created a painting in words, raising the question of imitation rather than interpretation: in "seeing" the painting, the reader could lose track of its representation in language, and discuss the representation in terms of the "original" experiences of the subject Rousseau. Moreover, Rousseau's self-representation becomes exemplary as an historical event, thus grounding the exemplarity of his representation, in himself. His Confessions are programmed to be perceived as immediate, self-justifying in a way that no novel could ever hope to be. By eliding the mediation of the creative process, Rousseau creates an illusion of immediacy which fulfills a pedagogical purpose that claims moral

⁴¹Jean-Jacques Rousseau, Oeuvres complètes, v. III, 7.

justification for the representation of himself. The Confessions establish representational authority and veracity through an examination of the self. But Rousseau's own allegiance to painting directs the Confessions towards the domain of "Beaux-Arts," that is, esthetics and therefore complicates his claim of authority and veracity. With his Confessions, Rousseau belongs to both the domain of taste and the domain of understanding.

Before examining Charrière's analysis of Rousseau in her Eloge de Rousseau, it is important to go back to the critical reception of the Confessions, at the time of their publication.

In 1789, the publication of a truncated version of the Seconde partie des Confessions gave rise to "l'affaire Rousseau." Rousseau, reports Condillac, had wished that the Confessions be published only after the beginning of the 19th century and after the death of all the people cited in the work. The care Rousseau took as to the publication of the Confessions reinforced the view that the Confessions were not like any other literary production of Rousseau, that what produced the Confessions was Rousseau's life. The reception of the Confessions seemed to prove Rousseau right. Rousseau had wished the Confessions to be amended if published before the death of all the people in the book.⁴² Pierre Alexandre du Peyrou, one of Rousseau's friends and owner of one copy of the manuscript had respected Rousseau's wishes, but Pierre

⁴²Isabelle de Charrière (X, 574). The Genevan booksellers justified the cut they did to the text of the Confessions, in a letter they wrote to Du Peyrou: "Oui, Monsieur. nous avons retranché les noms, et environ deux pages de grossières, plates et basses injures envers des personnes vivantes et respectables; injures qui n'ont aucune importance dans les faits, aucun mérite de style, aussi peu glorieuses à leur bilieux auteur, qu'inutiles au Public."

Moultou⁴³ decided to sell the copy to Genevan booksellers, arguing that there is no will left by Rousseau himself regarding delays for the publication and it was only word of mouth. The reactions provoked by the Confessions amongst readers centered around Rousseau's behaviour and Rousseau's wishes. Countless books on Rousseau⁴⁴ saw the day including: Lettre sur les ouvrages et le caractère de J.J. Rousseau (1788) from Germaine de Stael and Réponse aux Lettre sur les ouvrages et le caractère de J.J. Rousseau from Louis Pierre Quentin de Richebourg, marquis de Champcenetz.⁴⁵ These titles indicate that what was to be debated was Rousseau, the man. In Eclaircissemens

⁴³ Isabelle de Charrière, (X, 573). Pierre Moultou was the son of Paul Moultou, a Genevan minister, who befriended Rousseau, when he was in Geneva in 1754. In 1778, the year of his death, Rousseau entrusted one copy of the Confessions to his friend.

⁴⁴ Tanguy L'Aminot, "Un nouveau genre littéraire: l'écriture posthume de J.J. Rousseau," in: la Carmagnole des Muses. L'homme de lettres et l'artiste dans la Révolution, ed. Jean Claude Bonnet (Paris: Armand Colin, 1988) 319-326. L'Aminot notes that during the French Revolution, Rousseau very early on was claimed as representative by every party: Jacobins, moderates, revolutionaries and counter-revolutionaries. Each one has his Rousseau. Numerous books on Rousseau as well as "supercherries littéraires." attributed to Rousseau were published at the time. For example, on the first of April 1789, Rousseau supposedly sent a thankful note to Germaine de Stael on her Lettres sur les ouvrages et le caractère de Rousseau.

⁴⁵ Isabelle de Charrière (X, 177-180). Du Peyrou, for fear that Rousseau was misunderstood decided to publish his manuscript and asked Isabelle de Charrière to write an explanatory preface to the publication. In Textes Liminaires à la Seconde Partie des Confessions de Rousseau, Charrière juxtaposes the Genevan publication in one column and Du Peyrou's version in the adjacent column. The two manuscripts, published side by side, show how Rousseau had worked on his writing and paid attention not so much to what he should say but on how to say it.

relatifs à la publication des Confessions de Rousseau,⁴⁶ Isabelle de Charrière calls attention to the way critics reacted to the Confessions. In her view, they praise or criticize Rousseau's ability to be sincere, holding him up as an example of sincerity and as a criterion for judging sincerity.⁴⁷ By holding Rousseau as example of sincerity, they forget the work Rousseau produced at crafting his own image. Rousseau's "painting" does not designate but rather proposes simultaneously the project of the painter and its realization. Unlike the ideal representation of the Classics where the truth of the work lie in its correspondence to precise rules of writing, now beauty and truth lie in the psychological reactions of the readers to the representation. Rousseau's "painting" is a reality, to be branded as exemplary, the example of sincerity. These views on the Confessions extended to other works of Rousseau, held as examples of moral regeneration as well as examples of political manifestos: Emile and La Nouvelle Héloïse redeemed the domestic and conjugal virtues from the world's corruption and Le Contrat social offers hope for the construction of a new society. Rousseau himself is transformed into a symbol of the humble and virtuous man. Preoccupied by this tendency to understand literature in psychological or ideological terms, Charrière notes:

⁴⁶Isabelle de Charrière (X, 185-194).

⁴⁷In 1789, sincerity, that is a publicization of sincerity is at the center of the political debates. From the month of April 1789, after the convocation of the three states by Louis the XVI, grievances (doléances) had made their way to the king. In June 1789, members of the three different states, the clergy, the nobility, and the third estate seceded and founded the new National Assembly (Assemblée nationale constituante). In one of its first motion, the Assembly abolished censorship. In 1789, the abolition of censorship brought about a change within the intellectual climate which from a restrained but critical press saw the sudden emergence of countless political publications.

“Il me semble que les hommes de Lettres vont passer de mode. que les Lettres vont être négligées” (X. 190). Charrière points out that literary and philosophical questions that should have been asked as a result of Rousseau's works are replaced by probing inquiries about Rousseau himself. Literature is thought of from a purely historical and personal status⁴⁸ which Rousseau came about to exemplify:

Ce qu'il y a de bien sur, c'est que les temps, soit qu'on les trouve meilleurs ou pires, sont autres, comme dit Rousseau de lui par comparaison avec le reste des hommes Outre le changement qui s'est fait, il est des changemens qui semblent se préparer. Qui sait si dans dix ans on se mettra encore fort en peine de ce que fut Rousseau, de ce que furent ses amis & ses ennemis? Qui sait si l'on sera encore fort sensible aux charmes de son style? (X, 190)

⁴⁸François Furet, Mona Ozouf, ed. A critical dictionary of the French Revolution, trans. Arthur Goldhammer (Cambridge, Massachusetts: HUP, 1989). In 1790, the Assemblée Nationale discussed the possibility of passing a decree which would elevate a statue to Rousseau and gave a pension to his widow. On December 21, 1790, a motion is passed in the Assembly and Rousseau is awarded public honors. A bust of his, as well as a copy of the Contrat social is placed in the hall in which the Assembly met. Rousseau becomes an emblem of the revolutionary events happening in France. Rousseau is now not only encountering an historical movement but is made historical. Rousseau is regarded as the man who inspired the principles put into practice not only during the early period of the French Revolution but also later on, after August 10, 1792 and the proclamation of the Republic. From the first meeting of the General Estates and after the transformation of that body into the National Assembly, it was felt that the deputies embodied the "general will," a term first given currency by Rousseau. The traditional view that the Estates conveyed the will of the people was also regarded as part of Rousseau's rhetoric. During the Jacobin Republic, Rousseau's influence reaches its peak. Universal suffrage and direct democracy seemed to reflect the lessons of the Social Contract. In a speech given by Robespierre, on the cult of the Supreme Being, delivered on 18 floréal year II, Robespierre praised Rousseau and invoked his authority. Rousseau's ashes will be moved to the Panthéon on October 11, 1794. The petition urging the Assembly to approve the transfer of Rousseau's ashes to the Panthéon described the philosopher as the founder of the French Constitution because his writings systematically presented a theory of equal rights and popular sovereignty. Bernard Manin, "Rousseau," trans. Arthur Goldhammer, A Critical Dictionary of the French Revolution, eds. François Furet, Mona Ozouf, (Cambridge, Massachusetts: HUP, 1989) 829-844.

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Charrière reacts against this tendency to ask Rousseau's texts to be accountable for Rousseau's morals, and in Eclaircissements relatifs à la publication des Confessions, De Rousseau, Réponse à Monsieur Burke and her Eloge de Rousseau, she makes an appeal for discussions centering on the problematic of esthetics and rhetoric. In Eclaircissements, Charrière predicts that the political effervescence of 1789-1790 that brought about ideological discussions in Arts will culminate in the disappearance of Art itself:

Outre le changement qui s'est fait, il est des changements qui semblent se préparer. Qui sait si dans dix ans on se mettra encore fort en peine de ce que fut Rousseau, de ce que furent ses amis et ses ennemis? Qui sait si l'on sera encore fort sensible aux charmes de son style? (X, 190)

In La Carmagnole des Muses, Jean-Claude Bonnet notes that the status of "gens de lettres" rapidly declines under the Revolution. Writers are deemed to be parasites of society, literary institutions close down. And the main element of the fictional production of the period (1789-1799) is the ability to integrate political debates within the literary works. Literature is taken over by public discourse, and discussions about eloquence override discussions over esthetics.⁴⁹ This analysis echoes Charrière's complaints about the state of "literature" in 1790:

Il me semble que les hommes de lettres vont passer de mode, que les Lettres vont être négligées ... Le théâtre ne touche-t-il pas visiblement à sa ruine? Qui jouer sur nos tréteaux comiques? ... désaccoutumés de Racine, Corneille, Crébillon, Molière, &c. nous n'allions fort peu au spectacle, que nous ne lisions fort peu, & qu'on ne se soucie infiniment moins qu'aujourd'hui de Rousseau et de ses confrères en littérature. (X, 191)

⁴⁹Jean Claude Bonnet, La Carmagnole des Muses.L'homme de lettres et l'artiste dans la Révolution (Paris: Armand Colin, 1988) 297-304.

To make her point, Charrière wrote Plainte et Défense de Thérèse Levasseur.⁵⁰ On the surface, Plainte is presented as a plea in favor of Thérèse Levasseur, Rousseau's companion accused by Germaine de Staël, (as well as Barruel-Beauvert) of having provoked Rousseau's suicide.⁵¹ In the Confessions, Rousseau let it be understood that Thérèse had an affair. Thus, Thérèse unwillingly finds herself in the middle of the debate that goes at the heart of the literary debate.

Instead of writing on behalf of Thérèse, Charrière writes as Thérèse. This impersonation raises two important issues, one of interpretation and one of artistic creation. It ironically answers Barruet-Barruel and Staël's attacks against Thérèse since their attacks are directed at Thérèse of the Confessions. And it is as fictional representation that Charrière answers in the name of Thérèse. Charrière's intervention raise the important questions of taking representations at face value, that is as live individuals. However, Charrière's impersonation and substitution is an introduction to her main issue, discussing in the Confessions, the substitution of Rousseau by Rousseau. By substituting Thérèse, Charrière had directed her criticism at people who confuse literature with life:

Quoi, parceque Rousseau a fait à une pauvre fille qui ne savait ni lire ni écrire, ni voir l'heure qu'il était sur le cadran, l'honneur de lui donner son linge à blanchir & son potage à cuire; parcequ'il lui fait partager parfois son lit, & longtemps après son nom; il faudrait que cette pauvre fille devienne une héroïne, un grand esprit, une belle âme, à la manière de celle qu'on fabrique dans les livres, & que

⁵⁰ Isabelle de Charrière (X, 171-177).

⁵¹ Barruet-Baruel went as far as to compare Thérèse Levasseur to a viperine snake and propose to let her die: "Est-ce qu'on est obligé de fournir de la pâture aux couleuvres? Non, mais les laisser vivre est une cruauté!" (X, 568).

feu Mr. Rousseau disait n'avoir trouvé nulle part dans le monde! Vous êtes mort. & on vous idolâtre; je suis vivante et on m'injurie. Ceux qui prétendent vous apprécier le mieux, vous ont en effet mal connu; & vos livres qui sûrement enseignent la bonté sont perdus pour eux, quoiqu'ils s'extasient à chaque page, à chaque mot (X, 173)

First, Charrière-Thérèse scorns critics who see an adequacy between an "original" and the representation, and hold the representation accountable for acts in life. As "Thérèse" notices, they not only hurt her personally, but they avoid a discussion of Rousseau's works in terms of the imaginary dimension of his works, that he himself insisted upon. Charrière-Thérèse notices Rousseau's greatest achievement: his representations became alive for the better or the worst:

Vous était-il venu dans l'esprit que ce nom de Renou, ou de Rousseau, que vous me donnâtes sans que je le demandasse, me mettrait dans l'obligation de vous ressembler ou plutôt à vos femmes et maîtresses imaginaires? Ce fût votre réputation, non la mienne qui vous détermina. (X, 173)

However, in Plainte, Charrière does more than just condemn either de Staël for attacking "Thérèse" or Rousseau for having used "Thérèse." Plainte reflects on the literary process in which a "poor girl" becomes a "literary heroine," "a great mind," "a beautiful soul." The representations, she insists, are not people but ideals endowed with qualities, they are "embellished," the "naturel" is perfected. Hence, Charrière situates herself in the heart of the debate on artistic creation that had been going on since the previous century. For the classical ideal, art should not imitate nature but the "beau modèle" present in nature. For Charrière, art, and, more precisely, "writing" exhibits a linguistic structure.

It is in her Eloge de Rousseau,⁵² published in 1790, and unnoticed by critics at the time,⁵³ that Charrière elaborates further such literary and philosophical preoccupations.⁵⁴ Describing her essay as a reflection on the notion of perfection for an oratory discourse as well as a philosophical dissertation, Charrière chooses Rousseau as the "perfect" subject for her questions concerning literature.⁵⁵ Far from defending or attacking Rousseau's politics or morals, Charrière directs the debate into the literary domain. To mark the importance she grants to words, Charrière introduces her own Eloge by remarks on language. In Avis de l'éditeur, the preface to her Eloge, Charrière cites two mistakes: the first one, a grammatical mistake (the presence of a relative

⁵²Isabelle de Charrière, (X, 195-211). In 1790, the soon to be abolished Académie française, organized an essay competition devoted to Rousseau. Charrière participates but her Eloge remains a "lettre morte." Lacking an ideology on polemical point of views, as she herself points out, the Eloge will soon fall into oblivion: "L'académie peut aussi ne l'avoir trouvé que trop peu politique, ce qui n'est pas un défaut pour tout le monde dans un temps où nous sommes inondés de politique et d'ouvrages politiques."

⁵³Isabelle de Charrière, (III, 312). Although in a letter written to Benjamin Constant, on October 6, 1791, Charrière complains that Pierre Louis Ginguené, the author of Lettres sur les Confessions de J.J. Rousseau, Paris, Barois l'ainé 1791, had plagiarized her Eclaircissement sur les Confessions and her Eloge. "J'ai parcouru hier les lettres de Guingéné sur Rousseau & j'ai vu qu'il m'avait fait l'honneur de copier en délayant un peu, tant la petite brochure que vous avez emportée que l'éloge que vous n'avez pas lu. Plut au ciel qu'il ne fit pas de pire brigandage!"

⁵⁴At the time Rousseau was perceived as divided between two different writerly persona, the political author of Contrat social and the literary writer of La Nouvelle Héloïse.

⁵⁵Jean-Louis Lecercle, Rousseau et l'art du roman (Paris: Armand Colin, 1969) 6. Lecercle notices that Rousseau always was subject to two types of criticism one biographical, the other textual.

pronoun without antecedent) opens her Eloge and the second one, a contradiction, the misuse of a rhetorical figure, closes it:

Deux fautes le (l'auteur) choquèrent quand il relut son ouvrage de sang froid. Dès la première page, il vit un pronom relatif qui grammaticalement ne se rapportait à rien, et vers la fin du discours, il trouva une contradiction sinon réelle du moins apparente, et dans les termes si elle n'est pas dans la pensée. (X, 197)

Charrière introduces herself as the writer and reader of her own text. As an author, Charrière is shocked by the presence of mistakes in her own text. In so doing, the author places the emphasis on the attention that she as a reader brings to the text. The "engagement" Charrière brings to the text, begins with the attention she brings to the words, the tropes, the grammar. By pointing out the mistakes in the text not at the level of the referent (her discussion of Rousseau) but at the level of grammar, Charrière underscores that words only indirectly designate the things they express. And the relative pronoun signals an absence that it cannot designate. It is not surprising that the absence of a grammatical referent signals Charrière's first mistake. This insistence on grammar makes the point that her text belongs to the world of signs. If Charrière speaks of a grammatical mistake that opens her Eloge, she concludes on the misuse of a figure "Contradiction" which cannot be clearly attributed to grammar or thought. The second mistake emphasizes the transmission of signs and their interpretation.⁵⁶ If the first mistake

⁵⁶ Paul de Man, "Pascal's Allegory of Persuasion," in: Stephen J. Greenblatt, ed., Allegory and Representation (Baltimore and London: The John Hopkins University Press, 1981), 13. This brings back to mind Pascal's definition of "contradiction" in Pensées. It is under this heading that Pascal has formulated the principle of totalizing reading in which the most powerful antinomies are brought together. "Pour entendre le sens d'un auteur, il faut accorder tous les passages contraires." (257-684, 317) As De Man notes, applied to Scripture, this reconciliation leads to the fundamental opposition that underlies all others: that between a figural and a true reading. The question remains whether the pair figure-

underlines a one-to-one relation. from the pronoun to its grammatical referent. the second mistake points to a double relation of language to both thought and grammar. This last mistake shows the difficulty of distinguishing between the order of thought or the order of grammar in the text. In Eloge, Charrière's casual remarks become central preoccupations for the question of transmission of signs and their inherent ambiguities. This introduction poses the fundamental problem to which Charrière constantly returns in her works: How can a literary text account for itself if it always displays simultaneous relations? And where is the reader going to find the meaning of the text if the relation between words and referents is unstable? We may say that Charrière opens her Eloge on a metaphorical relation of words, a relation of substitution, as the absence of the grammatical referent of the pronoun can be supplied by the reader. But Charrière closes her Eloge on an allegorical relation of words as the meaning of a text is enclosed within a contradiction and this "contradiction" can no longer guarantee its interpretation. These debates on the use of grammar and the uses of figures drive Charrière beyond grammar without ever leaving the question of grammar. Having dealt with the question of grammar. Charrière speaks now about her major failure: an imbalance between the attention she paid to perfection in style and the lack of attention to perfection in philosophical discourse:

Un autre défaut, et celui-ci était sans remède, frappa l'auteur. Il trouva qu'il en avait trop dit sur la perfection pour un discours oratoire et pas dit assez pour une dissertation philosophique. En effet ce sujet aussi vaste qu'intéressant est à peine

reality can or cannot be reconciled. De Man' remarks on Pascal's text, can be extended to Charrière's approach to Rousseau's Confessions and through the mediation of her own text, Charrière poses a fundamental question regarding the Confessions: how to read Rousseau's Confessions?

indiqué. Que de preuves on pourrait donner de l'attente où nous sommes sans cesse de cette perfection que nous appelons toujours chimérique et impossible! (X. 197)

Charrière appears to introduce a division between the rhetorical and the philosophical. This division allows her to comment on how Rousseau was read at the time, either as a master of eloquence or as a master of philosophical thought. "Que ne pouvez-vous, ô Rousseau, me donner votre style enchanteur! Alors, je vous louerais dignement" (X. 199). Charrière makes a wry comment on Rousseau's style which deceives and enchants the reader. This comment continues to raise questions about reading as by now the act of reading does not only take into account the grammar or the figures of the text but also the psychological impact of the text on the reader. And this brings Charrière to question style as the main factor in literature:

Qu'es-tu donc charme du style, charme puissant et indéfinissable! Comment avec des mots si connus, si communs, dont nous nous servons si souvent, à pure perte, peut-on captiver, entraîner, plaire à tel point? Rousseau sait ennoblir le sujet le plus trivial, rendre grave une bagatelle, et plaisant ce qui paraissait le moins fait pour l'être. (X. 198)

Charrière insists that Rousseau is an eloquent writer, a master of rhetoric, that he can convince readers of the reality and truthfulness of his representations. But the question of imitation remains as Rousseau, not only embellishes but engraves moral values to his subject, he "makes noble" any subject (himself included), "gives weight" to issues, and alleviates even the most unpleasant "thing." However, critics such as Staël read Rousseau's representations as the fusion of Rousseau the man and Rousseau the representation. This reading brought about a judgment in terms of moral values on Rousseau himself, namely, that sometimes he is perceived as morally wrong sometimes

as morally right. In France he is held as the emblem of liberty, in England he is held as the emblem of tyranny.⁵⁷ In this ideological climate, Charrière persistently comes back to the question of literature and its transformative aspect, but, as she herself notices, her preoccupations are out of place.⁵⁸

Charrière wonders what made Rousseau not only the writer he was, but the one who provoked so much controversy. She offers three different ways to approach Rousseau : starting from Rousseau's selfportrait, she will try to say who he was, then, she will explain what she admires the most in him and finally find excuses for what should be excused. However, Charrière's biographical approach is complicated by her use of the word "peindre." Charrière's alternative to explain Rousseau is to perform a reading of Rousseau as a work of art, as a painting, that is, a display of form and a transformation of content:

Choisissant parmi les traits sous lesquels il s'est peint lui-même, je tâcherai de

⁵⁷ Edmund Burke had attacked Rousseau and held him responsible along with the "philosophers" for the Revolution. In a response to Edmund Burke, A Monsieur Burke, Charrière warns Burke against the "idolatrie" that is taking place with Rousseau but also counterattacks Burke's claim against Rousseau, advocating a reading of his texts instead of an attack against the man. The fallaciousness of this argument becomes apparent, adds Charrière, when it is remembered that Rousseau was already read widely under the monarchy and no political outburst took place on his account: "Vous croyez son auteur très vain, je le crois comme vous. Vous le croyez plus passionné pour un monde idéal que sensible pour les individus existans; nous sommes d'accord. Vous trouvez mauvais qu'il ait mis ses enfants à l'hôpital; tout le monde le trouve mauvais ... Craignons Monsieur de mettre un orgueil absurde dans les jugements que nous portons de ce que font les hommes car nous appartenons à cette race faible et coupable." (X, 213- 216).

⁵⁸ L'académie peut l'avoir trouve mauvais ou médiocre, mais elle peut aussi l'avoir trouvé que trop peu politique, ce qui n'est pas un défaut pour tout le monde dans un temps où nous sommes inondés de politique, et d'ouvrages politiques (X, 198).

dire ce qu'il était ensuite je fixerai mes regards sur ce que j'admire le plus en lui. enfin j'oserai y voir ce qui a besoin d'être excusé, et peut-être y trouverai-je des excuses propres à désarmer ce qu'il reste de détracteurs à la mémoire de ce bon et grand homme. (X. 199)

Rousseau is not only a painter but also a spectator, a listener and a speaker. As a painter, Rousseau proposes his art to the eyes and to the senses. By fusing his present tense and his memory, by fusing reading knowledge and his sensations, Rousseau, just like Pygmalion, gives life to forms. Rousseau transforms art into life. Hence, the Rousseau, known to the public belongs to the esthetic domain:

Mais quel était le genre de Rousseau en sa qualité d'écrivain? Rousseau était écrivain ce qu'il était homme. Toujours ému par des sensations exquisés, quelque tableau qu'il voulait tracer, son coeur et sa mémoire lui fournissoient et canevas et couleurs; et véritable Pygmalion séduit par son propre ouvrage, dès qu'il avait donné quelque forme, combien il étoit facile et naturel de le perfectionner, de l'embellir, de rendre son idole, l'idole de tout le monde ... peintre et spectateur, orateur et auditeur tout a la fois(X, 200)

But above all, it is the language of emotions which carries Rousseau's art.⁵⁹ Rousseau sought to express the values characteristic of his tragic vision of life. But to disclose his desperate straits, he must coordinate the elements of expression into a single organism of interrelated meanings so that the "painful inspiration" may obtain a clear outward expression. Rousseau had to transform his emotions into intelligible shapes and objectify the tangible forms of his personal sufferings. Therefore his artistic production is unique, isolated and ideal. For Charrière, this concept of isolation is fundamental to Rousseau's works and it rules out whatever is exclusively referential. The consequence

⁵⁹ A view of Rousseau most of the contemporaries shared. In Idées sur les romans, Sade describes Rousseau in these terms: "Rousseau à qui la nature avait accordé en délicatesse, en sentiment, ce qu'elle n'avait donné qu'en esprit à Voltaire ... " he also attributes to Rousseau "une âme de feu," " un esprit philosophe"(24).

of Charrière's remarks on Rousseau's style is that it undermines Rousseau's own claim to be rather than appear in the text. Charrière's insistence on the importance of discussing a creative process is further reinforced when in her epigraph to the Eloge written in English, she states: "His words were musick : his thoughts celestial dreams" (X, 199). In this epigraph, the first line is a verse taken from Shakespeare's Comedy of Errors (II,2). Endowing Rousseau's words with a literary genealogy, Charrière again repeats the usual judgment on Rousseau's style, but her words are taken from a comedy of errors, and hence her judgment is as much a repetition as a parody. To speak about poetry or literature "per se" seems to be a formidable task as each time Charrière brings about a question on style or literature, she immediately makes comparisons with "material" arts, that is, music or painting.

Charrière's discussion of Rousseau, in Eloge, can be seen as a long commentary on this metaphor. By fusing a literary quotation and her own writing in the unity of the epigraph, Charrière highlights, perhaps unwittingly, the exteriority of literary commentary to the text. When Charrière argues that Rousseau's thoughts are celestial dreams, she does not mean, like many critics of Rousseau, the dreams of Rousseau the man. Rather, she wants to draw attention to the figuration of ideas as "dreams" to their composition, both in fictional and theoretical works of Rousseau. If dreams are a self-produced imagery delivered in musical sounds, the question, whether Rousseau's writing can serve as a reliable representation of either Rousseau the man or his theoretical constructions is obsolete.

Although she appears to concede to critics that Rousseau's imagination is

extraordinary^{oo}. she insists however that Rousseau's exceptionality consists in his ability to translate information into images. reinforcing the point made earlier that literature cannot be a mere imitation or a simple recollection, but is a process of transformation engaging both form and matter. Of all his senses, hearing is singled out by Charrière as the predominant sense for Rousseau:

Qu'est-ce? Son oreille, oui la sensibilité de son oreille. Peut-être l'a-t-elle fait auteur. mais sûrement elle l'a fait l'auteur et même l'homme qu'il a été. C'est elle qui a dicté son style & choisi ses sujets & enfin réglé ses idées et sa conduite (X, 125)

In this quote, Charrière makes Rousseau's ear not only responsible for Rousseau the author but also the man. In French, "entendre" refers both to the apprehension of sounds and to the faculty of understanding. Therefore, Rousseau's particular "style" is to fuse both senses and understanding. This fusion is what dictates Rousseau's subject matter and even morals. But, adds Charrière leaving Rousseau and coming back to the question of the text. what forms can Rousseau's "style" take on?

A quelles pensées. à quels sujets à quelle conception un style harmonieux peut-il s'adapter? Serait-ce aux anecdotes piquantes, aux observations épigrammatiques, à l'histoire de nos guerres et de nos traités de paix? Non. on ne peut chanter que des faits héroïques ou de douces fictions; les dieux, la vertu, l'amour, les moeurs simples et sages, l'égalité des premiers hommes, la pauvreté noble et fière. (X, 203)

Here Charrière defines Rousseau's style as appropriate to lyric and epic poetry, to

^{oo}“Rousseau naquit avec des organes tout à la fois forts et subtils. Ses sens étaient parfaits, et au moindre éveil, les vives impressions qu'ils avaient confiés à sa mémoire, se renouvellaient avec une étonnante netteté. Ne serait-ce point la perfection des sens et celle de la mémoire qui formerait ensemble une imagination forte et brillante” (X, 199).

fiction. in one word to literature. By qualifying Rousseau's works as "ideal" epic or lyric, she rules out whatever is purely practical, since extrinsic values always depend upon a reference beyond the immediate object to an eventual use. Rousseau creates a pattern of forms. His imaginative reconstruction of nature distinguishes it from practical activity or ordinary perceptual experience. His works have a unity of design, an artistic coherence, and for the reader, the value of Rousseau's works is determined by the rich complexity of relations whose form (lyric or epic) is its basic factor. Charrière prevents a reading that differentiates between Rousseau, the writer of political treatises, Rousseau, the writer of philosophical essays and Rousseau the writer of novels.

In constantly coming back to the question of arts, Charrière points to Rousseau's writings not just as writings concerned with Rousseau as a topic but by Rousseau's preoccupation with expressing himself. To understand Rousseau or his works, is to understand how he created himself in his work. If Rousseau transforms reality as Charrière pointed out earlier, then his own representation of himself is uncertain, not because he does not exist but because he transforms himself within the act of writing himself.

However, Rousseau's ability is to persuade the readers of the "reality" of his world, to precisely devoid his representations of their artistic configurations. Hence, Charrière is now going to address Rousseau's own claim in the Confessions, to deliver not an example of a work of art but an example of human nature:

Ainsi s'exaltait sa jeune âme, les hommes reprenaient vie... Ainsi les objets presens s'embellissaient des couleurs de l'histoire et de la fable, ainsi joignant a ce qu'il voyait et entendait, ce qu'il avoit vu et entendu... coeur sensible voix melodieuse...et son imagination peuplait et créait ce monde idéal dans lequel il

crût vivre quelque fois et dans lequel il a su nous faire vivre avec lui. (X. 200)

What makes Rousseau's work exemplary is the effect of the work on the reader, that is his ability to create a chimera which appears to the reader as true. Rousseau's work provokes a confusion between what is literal and what is figural. The result of which brings about a reading of the representation identified as an historical subject. First, Charrière reminds the reader that the concept of "human nature" is a fabrication:

Oui. l'on nous fait un extrême plaisir de nous dire quelque fois que l'homme est naturellement bon: que l'homme de la nature est différent de celui que nous voyons partout. Alors nous nous persuadons que l'état de société n'est qu'une circonstance où l'homme pouvait se trouver ou ne se trouver pas; ... J'avoue que je ne sais ce que c'est que cette nature qu'on n'a jamais vue dans son intégrité, qui n'est dans aucun lieu, et dont on ne sait pas qu'elle ait été en aucun temps. (X, 205)

The text of the Confessions, a complex representation of human actions is understood as a mise-en-scene of Rousseau's life. Thus, Rousseau as character becomes the actor of his own text. This analogy to a theatrical is not so far fetched. Indeed, as an actor, Rousseau is available to the perception of the reader through his subjective representation, thus Confessions can be read in the specular representation of the subject by the subject. What Charrière is addressing is the difficult mechanism that fuses the representation as subject both in an ontological sense and a moral sense. Once the representation is apprehended by readers, it is immediately identified as a moral subject, and the numerous reactions to Rousseau's Confessions are witnessing this phenomenon. Rousseau is sometimes bad, Rousseau is sometimes good. Thus reading texts "fixe les opinions" and anticipates the revelation of the truth of moral nature. As Charrière comments : "De proche en proche les sens qui ont une si grande influence sur

les moeurs. dirigent aussi et fixent les opinions” (X. 580).

Again and again, Charrière pays attention to the mechanisms of idealization, the artificiality of the representation: “... [d]onnant à une belle femme un coeur sensible et une belle voix mélodieuse. à un homme juste du courage et de la douceur, à un champs fertile des fleurs brillantes et des eaux limpides. il préparait la Julie. L'Emile. Le Clarens de son imagination” (X. 200). And this should also be applied to the Confessions : “D'ailleurs quand le jeune Rousseau fait quelque rencontre extraordinaire, c'est lui qui la rend telle” (X. 200).

However, remarks Charrière, readers reading Rousseau's works still separate the style of Rousseau from the content:

... Et où allons-nous. surpris et curieux, interroger son art, chercher a reconnaître si c'est tel mot ou tel mot, tel arrangement de mots qui fait de nous ce qu'il veut? dans des projets et des hypothèses chimériques; dans une éducation impossible; dans un Contrat social, qu'aucune société n'a fait et ne peut faire; dans des Rêves en un mot. (X. 204)

Rousseau's writings are reduced to teaching manuals on style or aids for political or moral education. Thus, the question of what should be a criticism of Rousseau's texts is left unanswered. For Charrière the answer lies in the representation, a vision that fuses presence and moral quality. This vision has for consequence that not only the representation is endowed with moral identity but that taking a life on its own, it loses its reality as a literary representation. What gave rise to representation is forgotten or repressed and representation becomes frozen in its newly gained “reality.” Moreover, once identified as moral nature, the “reality” of the chimera comes back to haunt further moral discourses. To make her critical point stronger, Charrière turns her attention to

the creation of the mother in Rousseau's texts:

Mais déjà il avait pleuré une mère aimable qu'il ne connaissait que par des récits: déjà il avait reçu les soins de sa mie et de sa tante: il ne les oublia jamais. ni les premiers jeux. ni les premiers chants qui avaient charmé son oreille: toujours il aima la musique. toujours il espéra des femmes, et quelles douces images, quelles douces peintures ne sut-il pas tirer de ce qui lui avait manqué, et de ce qu'il avait éprouvé de leur part! Bonheur domestique, soins maternels, amour, vertu. comment ne sut-il pas vous concevoir et vous peindre! (X, 200)

Joining personal narratives about his likeable mother and his own impressions formed from images of mother, Rousseau extracts visions of motherhood. What one reads, argues Charrière, when looking at motherhood in Rousseau's writings is not the depiction of a social condition but a depiction of a desire for motherhood that gave way to a concept as well as an esthetic representation. For Charrière, literary representations are not referential examples one can discuss "per se," but they are "necessary" hypotheses. And to explain what she understands by a necessary hypothesis, Charrière compares morals to mathematics: "on peut mettre en même cathégorie [sic] le point mathématique et la perfection morale: ces choses-là ne sont ni vraies ni fausses, et on est sans cesse forcé de les supposer" (X, 582). Mother is a figuration of moral vision, which is neither true nor false. No moral knowledge can be drawn from the figuration itself, which as Charrière points out is an illusory marker like the mathematical dots. Therefore a knowledge of the figure as a moral subject can only be an illusory one. However, if we draw an analogy with mathematical knowledge where dots are indispensable for the tracing of mathematical figures, as anchors from which one can begin to formalize a mathematical figure, then fictive creations should help to give a shape to a moral knowledge and by extension a knowledge of society. In Charrière's point of view, to

understand mathematics it is indispensable to trace dots, and by analogy, fictional characters are indispensable for an understanding of society: "... l'âge d'or, l'homme de l'âge d'or ne sont matériellement pas vrais, mais ils sont vrais dans une hypothèse nécessaire, et que nous ne pouvons point ne pas faire, et à laquelle nous rapportons tout sans même nous en apercevoir" (X, 206). These reflections allow Charrière to demonstrate that without representations there can be no moral knowledge drawn. Hence, Charrière implies that to gain an understanding of morals and society, one is obliged to compare, to make analogies. Performing her own theory on knowledge, it is with an analogy that Charrière is going to develop a critical reading of Rousseau's works:

Pour lui fidèle à sa romanesque imagination, il cherchait toujours et voyait quelquefois dans des objets communs, des charmes extraordinaires. Don Quichotte, le visionnaire de Cervantes, ou ne se désabusait pas, ou après le désenchantement, respectait encore l'objet qui l'avait enchanté, au lieu que le visionnaire de la nature, irrité à proportion qu'il avait été séduit, ne voyait plus qu'un méchant, un perfide dans celui où il avait cru trouver le Pylade d'un nouvel Oreste. Son imagination le trompait une seconde fois. (X, 201)

Charrière has Rousseau and Don Quixote sharing a world of imagination. This analogy seems quite far-fetched if we think that one is a character in a novel and the other a well-known and respected writer. However, this comparaison allows Charrière comment on a critical approach to texts and the difficult question of literal versus figural meaning. Don Quixote, the visionary created by Cervantes never fools the reader, he is the fool who constantly misreads his external world, confounds his reality with fictional reality, takes the world of nature for the one of romance: mills become giants, and his reality becomes the romance world of his readings. Don Quixote never fools the reader as the

literal and the figural are clearly separated in the representation: mills have quite a different reality from giants. The difference between a figural and a literal reality in Don Quixote, are made clear within the story itself. The author, Cervantes reassures the reader and sides with him against the character Don Quixote. This complicity makes the reader dependent on the author for the meaning of the text. In Rousseau's Confessions, for example, the author does not reassure the reader as he is both the literal author and the character. Unlike Don Quixote who had Cervantes writing him, the character "Rousseau" has Rousseau as his writer. Cervantes allows the reader to differentiate between the literal and the figural, but Rousseau leaves the reader running the risk of occupying Don Quixote's position. To differentiate between both levels in Rousseau's texts is much more difficult, as both the literal and the figural appear under the same form: Rousseau. In the Confessions, Rousseau presents himself as subject before the eyes of the reader and creates the illusion of a character being present "per se," instead of being represented at all. The illusion that elides interpretation produces the pseudo-objectivity of Rousseau (the subject) speaking for himself to others. In the Preface of the Confessions, Rousseau suggests that the reader understand the character Rousseau in terms of the experiences of Rousseau the author. Moreover, Rousseau encourages the reader to make a comparison between him and Rousseau in order to gain a certain knowledge from this analogy. Rousseau not only represents Rousseau to Rousseau, but also represents Rousseau to the reader and ultimately we may conclude the reader to the reader. The reader is revealed to himself in the representation which gives itself directly to the eye of the reader as a spectacle rather than the exposition of a text. Charrière's

insistence on the creative process, her claim that texts display ideals, her insistence that representations are only points of departure for a reflection, redirect the reading of the Confessions and by extension the works of Rousseau, to a reading that includes discursive explanation whether as narrative or as critical commentary.

It is not surprising that Charrière chose Don Quixote since she comes to the conclusion that everyone, like Don Quixote has an idealized representation of the world . and it is precisely this ideal that stands as point of reference for comparison. To discern imperfections, that is to differentiate between “good” and “bad” Don Quixote needed fictional examples of perfection, especially the heroic ideals of moral perfection of the world of romances. We may conclude that for Charrière, the function of literature is not to provide examples illustrating perfections but to offer grounds for positing judgment. Forgetting the process that lead to the representations only brings about illusionary truth-statements: Mills becomes giants, or Charrière becomes Thérèse. Thus stories revealed nothing of their content but as stories they impose themselves on the reader and leave impressions which should be the point of departure for a reflection on the *configuration of the content*:

...des rêveries, de grands projets, de sublimes imaginations, si elles ne sont pas adoptées, laisseront au moins quelques mouvements dans l'âme qu'elles auront remuée. Les éclairs ne donnent pas une lumière d'après laquelle on se mette en chemin, comptant qu'elle éclairera constamment notre marche; mais il arrive qu'au moment où le ciel paraît embrasé on découvre quelque chose sur la terre, qu'on n'avait jamais vu. On pourra se le rappeler et l'aller chercher après l'orage. (X, 207)

In her conclusion to her Eloge, Charrière's rhetoric makes her critical point : to enter in dialogue with a writer is to enter in dialogue with the figures and the style the writers

created. Appropriating a lyrical language, a language Rousseau as well as most writers of sentimental novels made use of in their writings. Charrière offers her own critical perspective that focuses on language. Once again Charrière reminds the reader that fictions “rêveries,” and social contract “grands projets” are both figments of imagination but also that they are support for a reflection as they create some disturbance in the mind . However, Charrière also makes use of a central figure for the Philosophes of the period : the figure of lightning. In the use of this figure, Charrière speaks both at a metaphorical as well as at a literal meaning of “lightning.” At the literal level, she underlines the climactic fact that lightning does not so much shed a constant light on the surroundings as it shed light by suddenly illuminating the surroundings and then disappearing. This analogy can be understood in terms of the use of lightning for reason by Enlightenment philosophy. Reason as a constant light would lead society towards progress. Charrière too would emphasize the use of reason. However reason per se can also blind. As in the case of lightning, the sudden appearance of light in darkness does not illuminate, it blinds too. To be able to be effective, lightning is in need of reflection, of interpretation, lightning does not shed light directly. In the case of the Eloge, lightning is also a metaphor for Rousseau’s writings and a comments on how to read Rousseau. Rousseau’s works do not shed light or enlighten her mind, that is give an immediate apprehension of the matter Rousseau discussed in his books. Rousseau's works can shed no light on motherhood, natural man, social man or inequality. However, they do leave traces in her memory, and it is after recollecting the traces that Charrière can propose her own understanding of his works:

Pour moi ([Rousseau] Je n'en recois pas une simple instruction, ni un simple amusement. Ils me transportent comme dans un temple majestueux, où j'entends un chœur d'anges former une douce symphonie, et chanter Dieu, l'ordre et la paix. (X. 211)

As Charrière makes it clear, it is not the simple instruction or pleasure of the text that she get in reading Rousseau's works. What she receives from Rousseau's readings is the possibility of creating a work of art in her own terms. It is when reading Rousseau, she is brought to her own imaginative world, when "transported" in her own imagination, such ideals as God, order and peace take their own form. Her work begins when as a reader, she recollects stories, compares them and creates her own.

II. Exemplary Practice: Charrière's rewriting of *La Nouvelle Héloïse*.

In her Eloge de Rousseau, Charrière insisted she was not interested in Rousseau's experiences, feelings or morals as such, but in how experiences, feelings and morals became figures in Rousseau's text. Entering into dialogue with Rousseau will mean for Charrière to enter into dialogue with the fictions he created. Charrière chooses to appropriate certain figures of Rousseau's texts in order to respond to them in her own fictional works. Thus Charrière deals with Rousseau not at the level of his ideas but at the level of the expression of ideas. By appropriating and transforming Rousseau's figures, Charrière elaborates a very different sort of criticism from that which focuses exclusively on Rousseau's ideas. From her prospective, fictions belong to the art of criticism. As a result, this chapter will argue that the author of Lettres neuchâtelaises⁶¹

⁶¹Isabelle de Charrière, (VIII, 45-122).

is the reader of La Nouvelle Héloïse,⁶² and as such assumes a critical function.⁶³

In the title of Lettres neuchâtelaises, Charrière calls our attention to Neuchâtel,⁶⁴ a town in Switzerland, made famous by Rousseau, particularly in Lettre à d'Alembert sur les Arts.⁶⁵ In literature, Rousseau had been the first writer to proclaim himself "citoyen de Genève." Rousseau's works describe Swiss culture⁶⁶ in a series of poetic, political

⁶² Jean-Jacques Rousseau, Oeuvres complètes, La Pléiade, T.II. (Paris: Gallimard, 1961).

⁶³For example, in her novel Saint-Anne, Charrière has the main narrator, l'Abbé de la Tour, recount how M. de Sainte-Anne insisted on paying attention to how one speaks when trying to represent certain situation of suffering: "qu'[il] rejetait les appellations collectives et ... de peur qu'on ne sentit point assez le bien et le mal de son semblable ... voulait qu'on dit: les soldats souffrent de la faim, et non point: L'armée est mal approvisionnée. Les paysans travaillent trop, les artisans ne sont pas assez payés, les honnêtes marchands se ruinent et non: la culture manque de bras, l'or se cache, le commerce est entravé." Isabelle de Charrière. (IX, 302).

⁶⁴Neuchâtel, i.e. the French-speaking Switzerland is both a part of a geographic region in which the French language is spoken and a portion of the country Switzerland. There is no major linguistic division between French-speaking Switzerland and France. In the 18th-century, the border dividing the two countries was above all religious. In the late 17th century, after Louis XIV had revoked the Edict of Nantes, many Huguenot émigrés made their way to Switzerland, the country where the French reformers Jean Calvin and Guillaume Farel had taken refuge.

⁶⁵Jean-Jacques Rousseau, Lettre à d'Alembert (Paris: Garnier-Flammarion, 1967). All subsequent quotes from Lettre à d'Alembert are to this edition and will be cited in the text.

⁶⁶ Geneva became a justification for Rousseau's challenge to the corrupt great nations. The Genevan Republic gave Rousseau a political identity on the basis of which he could condemn other political systems. But in 1763 Rousseau renounced his title of "citoyen de Genève" when the Genevan magistrates drove him out of the community and publicly burned copies of L'Emile and Le Contrat social. As Starobinski remarks in Transparency and Obstruction, "Rousseau becomes doubly a rebel: the myth of Geneva with which he attacked France became reason for dissatisfaction with Genevan reality. Rousseau's rebellion

and philosophical explorations of difference expressed mainly in lyrical reflection upon intimate experience. Rousseau had constructed Switzerland as a perpetually different world, a world of honesty, passion and authentic virtue. From La Nouvelle Héloïse to Les Confessions and Les Rêveries d'un Promeneur solitaire, Switzerland is a remote pastoral world to which Rousseau devotes his most elevated pages. In his books, the feelings of his characters--Jean-Jacques, Rousseau and Saint-Preux acquire lyrical overtones as they draw near Clarens, Geneva or Neuchâtel. In contrast to the other countries, Switzerland is governed by a natural association of men rather than the artificial and nefarious society. Rousseau creates an image of Switzerland that can be called poetic without exaggeration. Its people add to Rousseau's style an element of bucolic tradition, and in La Nouvelle Héloïse, the characters of Julie, Saint-Preux, Wolmar and Claire act out the tragic pastoral, a conventional idyll in lyric style.

In Lettre à D'Alembert,⁶⁷ Rousseau identifies Neuchâtel as a perfect moral and economic society: "Je me rappelle avoir vu dans ma jeunesse aux environs de Neuchâtel un spectacle assez agréable et peut être unique sur la terre"(80). In Rousseau's own terms, Neuchâtel becomes a spectacle, "pleasant enough" ("assez agréable") but above all "unique". Hence, Rousseau takes delight not so much in the spectacle of the virtuous community as in the fact that this spectacle is unique. It is

quickly cut off all retreat, leaving only the inner resources of feeling and language, only literature to fall on." From now on, freedom, autonomy and self-determination for Rousseau will have specific discursive ramifications. (p. 333).

⁶⁷In Rousseau et l'Art du roman, (Paris: Armand Colin, 1969), p. 73. Jean-Louis Lecercle points out that Lettre à D'Alembert was conceived while Rousseau was writing La Nouvelle Héloïse. Lecercle speaks of the "osmotic" relation between the two works.

unique because its actors are all economically independent proprietors. social equals who possess political liberty:

Une montagne entière couverte d'habitations dont chacune fait le centre des terres qui en dépendent: en sorte que ces maisons à distances aussi égales que les fortunes des propriétaires, offrent à la fois aux nombreux habitans de cette montagne, le recueillement et les douceurs de la société. Ces heureux paysans, tous à leur aise, francs de tailles, d'impôts, de subdélégués, de corvées, cultivent avec tout le soin possible, des biens dont le produit est pour eux, et emploient le loisir que cette culture leur laisse à faire mille ouvrages de leurs mains. (80/81)

The existence of such a unique social entity becomes exemplary in the description of the narrator:

j'admira sans cesse en ces hommes singuliers un mélange étonnant de finesse et de simplicité qu'on croirait presque incompatibles, et que je n'ai plus observé nulle part. (my emphasis, 83)

In Rousseau's narration, Neuchâtel and by extension les Neuchâtelois possess both exemplary economic values (flourishing economy) and subjective worth (their moral quality). However, as I will argue, the Neuchâtelois are such valuable people only because the narrator is able to recognize their exemplary qualities. What ascribes value is not so much the economy or morals of the Neuchâtelois but the act of describing these values. However, the observation by itself is not enough. It is accompanied by a reflection which leads the narrator to the following synthesis: The Neuchâtelois are moral people. The order of the argumentation works counter to the order of description and the narrator locates the inherent moral values in the Neuchâtelois and then declares that he observed them. Therefore, what is celebrated more than the moral values of the Neuchâtelois is the ability of the narrator to discern inherent values and to recount them.

Charrière takes over Neuchâtel and "les Neuchâtelois" and incorporates them in the title of her novel. But the title Lettres neuchâteloises transforms the noun Neuchâtel into an adjective, "neuchâteloises." Reduced to an epithet, "neuchâteloises" acquires value only as an attribute. The inherent moral value assigned by Rousseau to the singular proper name Neuchâtel as well as its inhabitants (Neuchâtelois) is reduced in Lettres neuchâteloises to its grammatical function of an epithet to Lettres. The passage from noun to adjective announces an adaptation of Neuchâtel and Neuchâtelois to the fiction of the letters. Not concerned with proving that Rousseau's text provides a true or false image of Switzerland, nor interested in rewriting a beautiful work on Switzerland, Charrière nonetheless takes over Switzerland and Neuchâtel; her ironic treatment of Switzerland destabilizes the images that Rousseau had carefully crafted in his narratives, most importantly the image of Switzerland as moral.

Valérie Cossy suggests that Charrière's originality consists in her effort to foster a relation between author and reader "qui serait au plus près du rapport de réciprocité, d'égalité et de complicité qui existe entre deux correspondents".⁶⁸ This emphasis on the relation between author and reader can be traced back to Charrière's numerous comments on the importance of reading in her other works and correspondence, best illustrated by her remark in one of her latest novel Suite des Finch: "Le lecteur devient comme auteur lui-même de tout ce qu'il lit avec attention Il y a tel livre qui n'a peut-être jamais eu la bonne fortune que de n'être lu que par son auteur" (IX, 581).

⁶⁸Valérie Cossy, "Isabelle de Charrière, Frances Burney et le métier d'écrivain," Une Européenne: Isabelle de Charrière en son siècle. Colloque de Neuchâtel, 11-13 novembre 1993 (Hauterive-Neuchâtel: Gilles Attinger, 1994), 125-141.

In the light of this comment, we can infer that Charrière's critical attention concentrates not simply on what should her fictions represent but also on how to extend a literary tradition and become an author in her own right. It is therefore not surprising that she would privilege the act of reading over the act of writing. Indeed, her practice of writing mirrors her reading habits and, as mentioned in her Eloge, to read is to choose, and to choose is to be struck by certain passages and abandon certain others.⁶⁹ In addition to insisting on the importance of reading in her correspondence, Charrière chooses epistolary forms for her novels that present writing as reading or at best disguise writing as reading. Thus, Charrière's narrative strategy draws attention to the co-presence of at least two texts. The writing of the epistolary novels is the result of characters' reading each other's correspondence and writing again. Charrière's novelistic approach could best be described by Genette's definition of hypertextual practice.⁷⁰ Her narrators are not only the reader/writers and interpreters of their correspondents' letters as well as of a literary world but they are also the interpreters of a metatext omnipresent

⁶⁹In "Introduction to the Finch," Dennis Wood's analyses of Charrière's narrative strategy could be extended to all of Charrière's literary production: "Le roman et sa suite constituent une sorte d'exploration intellectuelle qui n'aboutit à aucune conclusion et dont le plaisir, à la lecture, dérive d'une certaine manière - vive, alerte, insolite - de poser des questions." in: Isabelle de Charrière, (IX, 512).

⁷⁰In his Palimpsestes. La littérature au second degré, Genette defines hypertextuality as the relation between two texts of which one is the text of reference. However, the text of reference is never clearly mentioned in the second text. In intertextual relation, one text refers directly to the other. Thus, Genette underlines that the difference between intertextuality and hypertextuality is that the "hypertextual" text contains an ambiguity which the intertext does not have. Indeed, the hypertext can be read both in its relation to a text that precedes it and independently of it (450).

in Lettres neuchâtelaises: Rousseau's La Nouvelle Héloïse⁷¹ Charrière does not so much demystify Rousseau's rhetoric by "de-figuring" his system of figuration, as substitute her own system of figuration which shows a preference for a style characterized by sobriety, laconism and distance.

In response to the adaptation of La Nouvelle Héloïse, the public, furious with her representation of "Les Neuchâtelais" accused her of "misrepresenting" the Swiss.

Charrière replays by insisting on the aesthetic stature of her text:

Je venais de voir dans Sara Burgerhart (roman hollandais) qu'en peignant des lieux et des moeurs que l'on connait bien, l'on donne à des personnages fictifs une réalité précieuse . . . mais ne peignant personne, on peint tout le monde. Cela doit être et je n'y avais pas pensé. Quand on peint de fantaisie, mais avec vérité un troupeau de moutons, chaque mouton y trouve son portrait, ou du moins le portrait de son voisin. C'est ce qui arriva aux Neuchâtelais, et ils se fâchèrent. (VI, 558)

Indeed, the subject of Lettres neuchâtelaises is bound to the reader. The comment above ("ne peignant personne on peint tout le monde") indicates that Lettres neuchâtelaises do represent "the world" but not directly. The aesthetic structure of exemplification, which allows Lettres Neuchâtelaises to be analyzed as a historical and political record⁷² turns

⁷¹Coulet insists that Charrière was in constant dialogue with Rousseau and that this relation permeates much of her works. See Coulet "Isabelle de Charrière, femme des Lumières?" Une Européenne: Isabelle de Charrière en son siècle. Colloque de Neuchâtel, 11-13 novembre 1993 (Hauterive-Neuchâtel: Gilles Attinger, 1994), pp. 9-23.

⁷²A thematic consideration of Lettres neuchâtelaises in terms of its social referent is still prevalent. For example, see Yvette Went-Daoust, "La place des Lettres neuchâtelaises dans le roman épistolaire du XVIIIe siècle," Une Européenne: Isabelle de Charrière en son siècle. Colloque de Neuchâtel, 11-13 novembre 1993 (Hauterive-Neuchâtel: Gilles Attinger, 1994) 187-197. Yvette Went-Daoust reads Charrière's Lettres neuchâtelaises in terms of its descriptive value with regard to the social conditions of her time. "Mme de Charrière utilise

out to be allegorical and puts in question not only the representational claims of the text but also the representational claims of its metatext. La Nouvelle Héloïse. Charrière's appropriation of Neuchâtel (as a setting for her story) is indicative of the attention that she as a reader paid to Rousseau's system of figuration. Charrière wants to inquire into the construction of Switzerland as a moral ideal. Although Charrière recounts a different story, she relies on La Nouvelle Héloïse to write Lettres neuchâteloises. Points of similitude between the texts are numerous, both at the formal and thematic level. At the formal level, both texts are epistolary novels whose stories center on three main protagonists, two women and one man. At the thematic level, the narrators of Lettres neuchâteloises (like their predecessors from La Nouvelle Héloïse) present a moral tale in the guise of a love story. In both novels, the writers choose Switzerland as the geographical setting for their stories. However while thematic similarities indicate a rapprochement between these two texts, the stylistic treatment of the theme (a moral tale of doomed love) differs tremendously. The technical innovations in Charrière's Lettres neuchâteloises (such as reduction from the polyphonic elements in La Nouvelle Héloïse to the monophonic expression, an atrophy of the novelistic conventions) mark the difference between the style of the narrators of Lettres neuchâteloises vis-a-vis their

en effet des procédés adaptés à une matière romanesque délicate puisqu'elle consiste largement en observations critiques sur les moeurs de ses concitoyens d'adoption" (187). In numerous discussions of Lettres neuchâteloises, critics have underlined Charrière's ability to describe the society she lives in. In her own time Charrière was judged harshly. The "Neuchâtelois" reacted to the fact that they were spoken about, and not to Charrière's critical reading of Rousseau's work. It appears that Charrière's criticism of referentiality in Eloge was not heard. See Isabelle de Charrière, Belle de Zuylen, Oeuvres complètes, vol. 8 (Amsterdam: G.A. Van Oorschot; Genève: Slatkine, 1989), 38-40.

predecessors in La Nouvelle Héloïse.

Even though Charrière keeps the story of Lettres Neuchâtelaises in French-speaking Switzerland, she retells it in a narrative voice different from the one adapted in La Nouvelle Héloïse. Julianne, a Swiss peasant girl goes to the town of Neuchâtel to work as assistant to a seamstress. One day, as she is on her way to deliver a dress to the destitute but aristocratic Marianne de la Prise, she sees a young man on the street. She turns around to look at him and falls to the ground. Henri Meyer, the young man, a German merchant, helps her back to her feet and accompanies her to her work-place. Afterwards, she meets him again, finds herself pregnant and, not knowing what to do, asks Marianne de la Prise for help. Meanwhile, Henri had met Marianne and fallen in love with her. Marianne, taking the matter in hand, orders Henri to provide for Julianne and the child. Julianne is sent to Germany and her child is placed to live and be educated with Henri's uncle.

In the second letter of Lettres neuchâtelaises addressed to a friend left behind in Germany, the narrator Henri Meyer begins his description of wine harvesting by remarking that "On dit que cela est fort gai." Without naming it, Meyer evokes indirectly a statement made in one of the most famous letters of La Nouvelle Héloïse, the letter Saint-Preux sent to Milord Edouard during his stay in Clarens (Part V, Letter 7).

Charrière's appropriation of La Nouvelle Héloïse happens when the lyrical as well as oratory register of Rousseau's writing is deflated by Charrière's more prosaic style. This appropriation which works by substituting highly lyrical expression with

common vocabulary is also repeated at the level of the theme when Charrière substitutes Rousseau's passion with a love-friendship. Thus Charrière's novel "met-en-oeuvre" her own critical comment: "Tout lecteur devient auteur." However, La Nouvelle Héloïse undergoes a complex transformative operation. Charrière will reduce the ornate story of the six books of La Nouvelle Héloïse to the concise tale of Lettres neuchâtelaises. By appropriating Rousseau's text, Charrière makes an important critical point. If Lettres neuchâtelaises cannot be read without Rousseau's La Nouvelle Héloïse, then Lettres neuchâtelaises contains within itself an excess, an excess in reading. And it is precisely this excess in reading that questions the novel as complete within itself thereby blocking its closure. Lettres neuchâtelaises has no "proper" ending, a reproach that Germaine de Staël directed at the novel:

[J]e me suis intéressée vivement aux Lettres neuchâtelaises mais je ne sais rien de plus pénible que votre manière de commencer sans finir, ce sont des amis dont vous nous séparez, et la cessation de toute correspondance avec eux me donne contre vous un peu de l'humeur ... (IV, 162)

Knowing Charrière's creative process, we can pinpoint the source of de Staël's dissatisfaction. She attempted to read Lettres neuchâtelaises as a text complete within itself instead of relating it to the work of Rousseau. Hence in order to read and to question Lettres neuchâtelaises, it is indispensable to return to the works of Rousseau and his depiction of Switzerland in his writings. The scene of wine harvesting recounted by Saint-Preux has been held as the supreme achievement of Rousseau's style.⁷³ In Lettres neuchâtelaises wine-harvesting is suggested by the use of vocabulary

⁷³Lecerclé insists that the pages on wine-harvesting are among the most beautiful--and most commented upon--pages Rousseau has ever written. p.223.

which alludes to it (“vendanges,” “chars,” “tonneaux,” “descriptions”). Both Rousseau’s Saint-Preux and Charrière’s Meyer are foreign to the culture of wine harvesting: the former is a Swiss tutor, the latter is a German merchant. Using this foreignness as the reference point, Charrière seems to propose a comparison between two similar albeit different spectacles of wine harvesting.

In La Nouvelle Héloïse, Saint-Preux offers a picture of beatitude in which the life of the wine harvesters has become an happy one. However, the organization of the scene in La Nouvelle Héloïse shows that this passage is more than just a characterization of the wine-harvesters as proof of existential happiness. The attempt to read wine-harvesting with Charrière’s guidelines in mind reveals that Saint-Preux’s description is not so much concerned with the wine-harvesters as a theme as with how Saint-Preux places them in his discourse.

The letter opens with a lyrical comment about the mental state of Saint-Preux in Clarens (“Une ivresse plus douce que celle du vin me jette au fonds de l’âme un trouble délicieux”⁷⁴). This emotional comment is followed by an exclamation which has a persuasive value (“Je ne conçois pas quel séjour pourrait me déplaire avec la société [de Clarens] ...”). This exclamation becomes a truth-statement about rustic life when Saint-Preux claimed with intensity that “A Clarens, je m’y sens vraiment à la campagne et c’est presque la première fois que j’en ai pu dire autant”(602). If “je ne conçois pas” expresses the power of reasoning, “je sens” expresses the power of his sensibility,

⁷⁴Jean-Jacques Rousseau. La Nouvelle Héloïse. Oeuvres complètes, La Pléiade, vol. 1 (Paris: Gallimard, 1961) 602. All subsequent quotes from La Nouvelle Héloïse will refer to this edition and will be cited in the text.

independent of any reasoning. Saint-Preux is both taken by his emotions and confirmed in his emotions by his reasoning. This use of reason and emotions has Saint-Preux express himself in the double register of the lyrical and the oratory. In their precipitation, these sentences acquire argumentative as well as affective values. Saint-Preux's description becomes a pretext for a discussion of natural man: "le travail de la campagne est agreable à considérer . . . c'est la première vocation de l'homme Il rappelle une idée agréable"(603). The effect of such a mixture has Saint-Preux illustrate morals in a series of images, attributed to the moral effect of the landscape on his imagination, instead of a demonstration of morals by way of argumentation. First, he describes the influence of rustic life on sensibility ("la simplicité de la vie pastorale et champêtre a toujours quelque chose qui touche") which brings about numerous contradictions between soul, senses, social prejudices ("j'avoue que la misère qui couvre les champs en certains pays . . . ôtent beaucoup d'attrait à ces tableaux " [603]). Saint-Preux's thoughts give themselves up entirely to imagination: "imagination ne reste point froide à l'aspect du labourage et des moissons Comment se dérober à la douce illusion que ces objets font naitre?" (603). To speak about rustic life, Saint-Preux's reasoning has recourse to a world of images filled with conventional rhetorical figures such as found in the tragic style ("inflexible," "âpre," "dévore les fruits de la terre," "exténués," "prêts d'expirer," "il faut manger le sang") or in the repertoire of classical culture ("On se transporte aux temps des patriarches," "les grâces sur leurs trônes," or mythology ("père Lyée"), or in the Bible itself. In addition to being an exercise in utopian thinking, the scene of wine-harvesting is also a stellar example of how a

catalogue of the conventional figures of rhetoric and literature mediate between sensibility and judgment.

Foregoing more conventional parts of La Nouvelle Héloïse, Charrière selects one of Rousseau's most lyrical passages for "rewriting":

Depuis un mois les chaleurs de l'automne apprêtaient d'heureuses vendanges; les premières gelées en ont ammené l'ouverture Toutes les vignes chargées de ce fruit bienfaisant que le ciel offre aux infortunés pour leur faire oublier leur misère: le bruit des tonneaux, des cuves, des legrefass qu'on relie de toutes parts; le chant des vendangeuses dont ces coteaux retentissent ; la marche continuelle de ceux qui portent la vendange aux pressoir: le rauque son des instruments rustiques qui les anime au travail; l'aimable et touchant tableau d'une allégresse générale qui semble en ce moment étendu sur la face de la terre; enfin le voile de brouillard que le soleil élève au matin comme une toile de théâtre pour découvrir à l'oeil un si charmant spectacle: tout conspire à lui donner un air de fête; et cette fête n'en devient que plus belle à la réflexion, quand on songe qu'elle est la seule où les hommes aient su joindre l'agréable à l'utile. (457)

In his seminal commentary, Starobinski described wine harvesting as "little more than a pretext, a circumstantial cause. The real object of the feast is openness of the heart It is a spectacle ... in which everything is made plain."⁷⁵ In La Nouvelle Héloïse, wine harvesting allows a balanced exchange between the benevolent external nature (the sun is shining, wine-trees are covered with fruits), and the happy wine-harvesters (forgetting their misery, singing with joy). This joy is at the same time created by the surrounding nature and represented by it. Starobinski notes that wine harvesting can be regarded as an allegory of the equilibrium between inner feelings and outer appearances that sustains the ideology of La Nouvelle Héloïse. However, this scene harbors an inconsistency that Starobinski doesn't mention. On the one hand, the scene of wine harvesting is an elegiac description of natural society; on the other hand, it is

⁷⁵Starobinski, p.93.

branded as planned conspiracy (“tout conspire à lui donner un air de fête”). This duplicity reinforces the impossibility of separating the lyrical from the rhetorical in Rousseau's writings. The description is set up to allow the judgment of the narrator to be pronounced and to present him as a man who knows how to observe and explain human nature. The importance of this passage lies not in the objective description of wine-harvesting but in its function as a reflection of the narrator's thoughts and feelings, who chooses to express himself with adjectives of a sentimental rather than descriptive value. The adjectives (“heureuses,” “bienfaisant,” “aimable,” “touchant,” “charmant”) used by Saint-Preux describe an evaluated impression and therefore go beyond mere registration of a sensation. The serial accumulation of the adjectives shift emphasis from the proper qualities of the object to the feelings that Saint-Preux experiences. The “pictoresque” is produced; but the composition of the descriptive ensemble itself is not lyrical but oratory.

The spectacle of wine harvesting is clearly intended to seduce the reader with its ethereal descriptions and thus inebriate him. In the second paragraph, Saint-Preux reflects on his own narration: “et cette fête n'en devient que plus belle à la réflexion, quand on songe qu'elle est la seule où les hommes aient su joindre l'agréable à l'utile”(457). It is this supplemental reflection that gives positive value to the inebriating narration. Wine-harvesting becomes beautiful on reflection (that is, either after reflection or while reflecting upon it). But why does this particular supplement justify the value of the description? The self-evidence of the happiness of the wine-harvesters in the description can never be assured by their appearance alone. It is therefore

indispensable for Saint-Preux to posit a subjective judgment which will guarantee the valuation of the "picturesque." Saint-Preux also happens to be a reader who assigns meanings to the situation he describes. Because it is an aesthetic description, Saint-Preux's narrative does not carry any moral value; therefore, if he intends to show the moral values of the wine harvesters, he has to supplement his own description. The narrative of wine-harvesting becomes a set-up for the narrator to exercise his powers of judgment.

In contrast to La Nouvelle Héloïse, Charrière's own letter on wine-harvesting opens with the reflective statement, namely, Meyer's remark that is reminiscent of Saint-Preux's conclusion ("On dit que cela est fort gai"). Playing with the exceptional status that Rousseau had marked for Switzerland and Neuchâtel in particular, Charrière practices a radical kind of mimesis with her selective and stylized incorporation. Now we can understand why the second letter of Lettres Neuchâtelaises points towards the judgmental statement "cela est fort gai":

Je suis arrivé ici il y a trois jours, mon cher ami, à travers un pays tout couvert de vignobles, et par un assez vilain chemin fort étroit et fort embarrassé par des vendangeurs et tout l'attirail des vendanges. On dit que cela est fort gai; et je l'aurais trouvé ainsi moi-même peut-être, si le temps n'avait pas été couvert, humide et froid; de sorte que je n'ai vu que des vendangeuses assez sales et à demi-gelées. Je n'aime pas trop à voir des femmes travailler à la campagne si ce n'est tout au plus aux foins. Je trouve que c'est dommage des jolies et des jeunes; j'ai pitié de celles qui ne sont ni l'un ni l'autre, de sorte que le sentiment que j'éprouve n'est jamais agréable; et l'autre jour dans mon carosse je me trouvais l'air d'un sot et d'un insolent, en passant au milieu de ces pauvres vendangeuses. Les raisins versés et pressés dans les tonneaux ouverts, qu'on appelle gerles, et cahotés sur de petites voitures à quatre roues qu'on appelle chars, n'offrent pas non plus un aspect bien ragoûtant. (VIII, 48)

Charrière's "wine harvesting" is not the joyful event ("ivresse douce") described in La

Nouvelle Héloïse. It is a show of hard work which instead of a spectacle of joy offers a pitiful and “disgusting” view, recounted by a narrator removed from the scene and hiding in his coach. This element of “being remote” can also be understood as Meyer's critical position in relation to Rousseau's narration. Initially, Meyer agrees with Saint-Preux's description by indicating that he could have found wine-harvesting a gay spectacle if the weather had been different: “On dit que celà est fort gai: et je l'aurais trouvé ainsi moi-même peut-être, si le temps n'avait pas été couvert, humide et froid.” Meyer indicates that he expected to see what he had read, but the weather wanted it otherwise. Without the change of climate, Meyer would have repeated what he knew from Rousseau's scene. But in Charrière's narration the wine harvesters are frozen by the cold. As a result, the objects of representation themselves (wine-harvesters) recede to the background as Meyer's description invites the reader to compare his narration with that of Saint-Preux. Meyer, then, conforms to Charrière's critical imperative: To become an author is to have been an attentive reader. Charrière's strategy does not so much demystify Rousseau's rhetoric as puts side by side two systems of figuration. Her “change of seasons” serves to displace the theme of transparency and to expose Saint-Preux's rhetorical determination of the meaning of the scene. Thus, the wine-harvesters proves to be merely a point of departure for Saint-Preux's imagination to deploy its wings. The question raised by Lettres neuchâtelaises becomes the question of the mediation of the aesthetic production. Saint-Preux was moved at the sight of a beautiful spectacle because he felt much more than he saw. What Saint-Preux experiences is immediately translated into an image that confers an esthetic stature upon the spectacle.

Charrière directs the attention of the reader to the way the events are spoken about and highlights the complex relationship between the narrator and the narrative which cannot be limited to a simple flight into what is expressed. What Meyer recalls is Saint-Preux's judgment and not the beautiful images of wine-harvesting. However, Meyer does not propose an alternative discourse to the one of his famous predecessor, he merely reduces Saint-Preux's long description and moral judgment to a simple sentence. Hence, Meyer divorces Saint-Preux's judgment (based on aesthetic experience) from the objects of representation (the wine-harvesters).

Charrière's critical fiction performs another chiasmatic gesture in the representation of literary characters. If Saint-Preux has been perceived by critics as the representation of a man of feelings, in light of Charrière's critical presentation he became a man of taste using all his rationality to convey a moral message and Meyer, the man of few words becomes a "véritable âme sensible" when, concealed in his coach, he gives way to his feelings of pity and shame ("j'ai pitié, le sentiment que j'éprouve n'est jamais agréable. je me trouvais l'air d'un sot et d'un insolent, un aspect ragoûtant" (VIII, 48).

Having destabilized the moral values uncovered by Rousseau's protagonist in the scene of wine harvesting, Charrière turns her attention to the real bond between the wine-harvesters, the wine itself, a product whose social and economic function Rousseau has surprisingly overlooked in Saint-Preux's aesthetic "rêverie." In Charrière's rendition of Rousseau's passage, wine takes central importance. Rousseau describes wine in the most enthusiastic terms, singing praise to "ce bienfaisant fruit": "En Suisse,

on boit beaucoup de vin d'absynthe: et en général. comme les herbes des Alpes ont plus de vertu que dans les plaines. on y fait plus d'usage d'infusions" (606). Later wine is endowed with magical power : "Le pampre grillé laissant la grappe à découvert étale aux yeux les dons du père Lyée. et semblent inviter les mortels à s'en emparer" (604). In sum. on the basis of this passage alone. one could conceive of Rousseau's poetics of wine! More than an object of nature, wine becomes the "philosophical stone" of Rousseau capable of transforming the burdens of everyday labor into the pure gold of blissful oblivion: "Toutes les vignes chargées de ce fruit bienfaisant que le Ciel offre aux infortunes pour leur faire oublier leur misère" (604). And this magical operation is performed by Julie with the help of Saint-Preux:

Outre les vins destinés pour la vente et pour les provisions ordinaires, lesquels n'ont d'autre façon que d'être recueillis avec soin, la bienfaisante fée en prépare d'autres plus fins pour nos buveurs, et j'aide aux opérations magiques dont je vous ai parlé. pour tirer d'un même vignoble des vins de tous les pays. (606)

This magical operation not only brings the community together under the auspices of joy but it also allows an industrious economy to flourish which compensates for the harshness of the geographical terrain and the different climates. Wine does not only bring people together. It has a magical quality which defies climate and regions: "Tous ces vins différents ont leur apprêt particulier; toutes ces préparations sont saines et naturelles : c'est ainsi qu'une économe industrie supplée à la diversité des terrains, et rassemble vingt climats en un seul" (606).

In Charrière's treatment of wine, the euphoric inebriation of Saint-Preux's description yield to a feeling of noxious intoxication for Meyer:

C'est une terrible chose que ce vin! Pendant six semaines je n'ai pas vu deux

personnes ensemble qui ne parlissent de la vente. Il serait trop long de t'expliquer ce que c'est, et je t'ennuierais autant que l'on m'a ennuyé. Il suffit de te dire que la moitié du pays trouve trop haut ce que l'autre trouve trop bas, selon l'intérêt que chacun peut y avoir:et aujourd'hui on a discuté la chose à neuf, quoiqu'elle soit décidée depuis trois semaines. Pour moi si je fais mon métier de gagner de l'argent, je tâcherai de n'entretenir personne du vif désir que j'aurai d'y réussir : car c'est un dégoûtant entretien. (VIII, 57-58)

Just like Rousseau, Charrière describes wine but not without significant “revisions.”

Instead of bringing the community together (as it did in the case of Clarens), in Meyer's letter wine becomes a culprit responsible for the communal dissolution. The reason for the nefarious social effects of this “bienfaisant fruit” is its statute as a commodity that thrives on people's desire for gain and profit. Wine sets off an inescapable chain of economic exchange, sale and profit and becomes a “terrible thing.” As a mere commercial product, the wine in Charrière's narration intoxicates not only the wine harvesters, but the entire community as it obfuscates transparency with economic calculations and deviates society from the path to idyllic closeness exalted in Rousseau.

The market economy becomes a metaphor for a world of mutation and of transformation, as the society of transparent beings is subsumed into an opaque and eager struggle for profit. Charrière's characterization of wine reconfigures a discursive space where her narration takes place. In the negotiation between two accounts of wine, the economic and moral significance Rousseau had assigned to wine harvesting in Clarens is mediated by Charrière's writing and becomes itself subject to negotiation, exchange and transformation. Charrière will extend the metaphor of the market to the sexual economy when she will treat her characters' relations to one another.

Rousseau had declared in the Confessions, that he wanted to write a novel of

love but only in order to give it moral exemplary value. Julie would be narrated because her comportment would contrast with the “[révoltant] spectacle des mœurs à la mode”(434). What would be exemplary and convincing about Julie's conduct would be the possibility to regain her virtue:

Mais qu'une jeune personne née avec un coeur aussi tendre qu'honnête se laisse vaincre à l'amour étant fille, et retrouve étant femme des forces pour le vaincre à son tour et redevenir vertueuse. (434)

Rousseau succeeded in persuading the public of the moral worth of La Nouvelle Héloïse's scenario. As a result Julie was held as an exemplary woman.

In La Nouvelle Héloïse, when Julie asks Saint-Preux to respect her virtue, she does so in the name of the traditional maxims of conduct. The words she employs to express her demands come from the language of courtois literature as well as the rhetoric of religious morals when, for example, she agonizes about her passion as the perdition of her soul if her love is not sanctified by marriage. But nothing will help and Julie, the paragon of virtue, is tainted. Julie may have chosen Saint-Preux as a lover but the consequences of her action and most notably her marriage to Wolmar is beyond her control. And this lack of control is already expressed when Julie's words to express her fears come from traditional rhetoric. Charrière's representation of virtue will definitively break with a tradition that was definitely reasserted in La Nouvelle Héloïse. Unlike Rousseau who plunges the reader into the midst of a passion, Charrière discards the representation of passion or love as an external force that does not engage personal responsibility (“l'aveugle amour”). Lettres neuchâtelaises takes over the same theme (love and its consummation) but offers a gesture of defiance with regard to the scenario

of La Nouvelle Héloïse. In Lettres neuchâtelaises the passion is consigned to the ellipsis and the personal responsibilities of the characters (with regard to the consequences of their passions) are brought to the foreground. In La Nouvelle Héloïse, it was marriage that allowed Julie to transcend the opposition between her passion for Saint-Preux and her passion for virtue. In La Nouvelle Héloïse, marriage allowed the plot to come together and served as a basis for centering the narrative, not only geographically in Clarens but also emotionally as it regulates the passions of the characters. Everyone and everything converges on the married couple, and the aura of their married life reflects back on the people around them. In Rousseau, marriage functions as a divine intervention as it is marriage itself that Julie invokes to speak of the change that happens to her personality: "Comment s'est fait cet heureux changement? Je l'ignore. Ce que je sais, c'est que je l'ai vivement désiré. Dieu seul a fait le reste"(343). Julie had the intention, the desire for a change in her life, but she ascribes responsibility for that intention and desire to God. In strict conformity with morality and religion, Julie's behavior offers a conventional resolution to conventional problem. Julie, says Starobinski needs "innocence and love" but she can not have both (87). To attain this stage, "Rousseau had to invent a dialectical process ... had to work for transcendence and imagine a process of becoming"(87). In La Nouvelle Héloïse, Julie's solution is proved to be illusory: even though Julie is under the impression that after marrying Wolmar she will be able to redeem her virtue while sustaining her love (for Saint-Preux) the denouement of the book seems to indicate that these opposites (virtue and passion) cannot be reconciled. Julie dies, and her moral dilemma remains without

answer.

In Lettres neuchâtelaises, marriage never intrudes on the lives of the main characters. From the central position that it holds in La Nouvelle Héloïse, marriage in Lettres neuchâtelaises is moved to the periphery. Marriage is mentioned in the first letter, the fourth and the eleventh, but in contrast with La Nouvelle Héloïse, it is not the main event of the story. Even though, marriage does not organize the plot, in Lettres neuchâtelaises, it is still subjected to careful analysis by the three main characters. Meyer analyses the marriage of his friend, Godefroy Dorville. Julianne rejoices at her cousin's wedding and Marianne comments on her best friend's wedding. The narrators have different points of view on what marriage stands for. For Julianne, marriage is the occasion for joyous and upcoming festivities:

[E]t pour ce qui est de la cousine Jeanne-Marie, elle sera, qu'on dit, bientôt épouse avec le cousin Abram ; et j'en suis, je vous assure, fort aise, l'ayant toujours aimée; et si ça ne se fait qu'au printemps, nous pourrions bien nous deux la cousine Jeanne-Aimée aller danser à ses noces ce que je ferais de bien bon coeur. (VIII, 47)

Marriage is taking on added meanings in Julianne's words, for she is looking forward to the "noces" meaning in French both wedding and "debauchery." Marriage dissolves the sacred moral aura it has for Julie in the word "noces"; as a consequence marriage becomes a simple festivity. Julianne's words void marriage of its religious and moral connotations as it becomes an occasion for dancing and celebrating. The redemptive value that marriage held for Julie de Wolmar is lost in the language of Julianne.

For Marianne de la Prise, the educated French aristocrat, marriage becomes a simple negotiation, the possibility of a viable social pact, but, claims Marianne, a pact

one should make only when one is able to exercise one's own judgment, a judgment that would take place only after one reads, identifies, compares and differentiates feelings in fictions:

Si celà te convient, épouse-le, Eugénie. Penses-y cependant : regarde autour de toi pour voir si quelqu'un d'autre n'obtiendrait pas de toi un autre sentiment. N'as-tu pas lu quelques romans? et n'as-tu jamais partagé le sentiment de quelqu'héroïne? . . . demande et pense. Non: ne demande à personne: on ne t'endendra pas: interroge-toi bien toi-même. (VIII, 65-66)

Marianne advises her friend to choose a husband on the basis of a very fine balance between freedom and interest for the person. As a result, marriage takes the form of a very prosaic decision. Marriage should be the result of the ability that one has in reading as it should allow to differentiate between stories of marriage and bring about self-reflection and decision.

Henri Meyer mentions the prospects his friend, Godefroy Dorville, has on the sister of his own sister-in-law. Meyer advises his friend against marriage, invoking the resemblance between the two sisters. Their likeness in figure and tone of their voice, indicates for Meyer that they must have the same capricious character. He concludes that the sister his friend wants to marry will be as nasty as the one he knows. In that example, the understanding of marriage assumes a transparency as it would allow the true personality of the person to surface because the proximity and intimacy of the two people makes it impossible to lie to each other.

The three discourses on marriage cited above share the same quality: they treat marriage not as a redemption, not as a solution, not as a divine intervention but as a mere fact of life. Charrière resists any temptation to inscribe an overarching

interpretation of marriage and grants different points of view to her characters. In accordance with her polyphonic practice, Lettres neuchâtelaises proposes different stories of desire which each narrator recounts. In La Nouvelle Héloïse, the story of desire began in “media res.” Saint-Preux is already in love and confesses it to Julie who reciprocates. The reader is immediately plunged into the abyss of Saint-Preux and Julie's passion, a passion based on the immediacy of feelings legitimized by “natural” attraction. In Lettres neuchâtelaises, desire is also recounted but in contrast to the natural and immediate attraction of Saint-Preux for Julie and vice-versa, desire is never immediate and spontaneous and is always mediated by someone or something. Thus, Charrière creates yet another breach in the understanding of natural attraction in La Nouvelle Héloïse.

After the announcement of her cousin's wedding, Julianne recounts the events of the day--how she had fallen on the street with Marianne's dress in hand and how Henry Meyer had helped her to her feet. This story is told by Julianne twice, and then it is retold by Meyer and also by Marianne de la Prise:

Et à présent, chère tante, il faut que je vous raconte ce qui m'arriva avant-hier. Nous avons bien travaillé tout le jour autour de la robe de Mlle de la Prise, de façon que nous avons été prêtes de bonne heure, et mes maîtresses m'ont envoyée la reporter ; et moi comme je descendais en bas le Neubourg, il y avait beaucoup d'écombres, et il passait aussi un monsieur qui avait l'air bien genti, qui avait un joli habit. J'avais avec la robe encore un paquet sous mon bras et en me retournant j'ai tout ça laissé tomber, et je suis aussi tombée; il avait plu et le chemin était glissant: je ne me suis rien faite de mal; mais la robe a été un peu salie : je n'osais pas retourner à la maison et je pleurais; car je n'osais pas non plus aller vers la demoiselle avec sa robe salie, et j'avais bien souci de mes maîtresses qui sont déjà souvent assez gringés Le monsieur voulut venir avec moi pour dire à mes maitresses que ce n'était pas ma faute car le Monsieur est revenu le soir pour demander si on a bien pu nettoyer la robe: je lui ai dit qu'oui. (VIII, 47)

The first scene of desire is narrated by Julianne. Julianne acts upon a desire which Claire Jaquier notes, is as much a social as erotic, as Meyer appears to have both "un air genti," and a "joli habit." What gives rise to Julianne's desire is what Meyer appears to have: Kindness and Money. Surprised by the sudden appearance of Meyer, Julianne drops the dress she was carrying to Marianne de la Prise. The dress fell in the mud and got stained. Therefore, before Marianne could wear the dress to go to a concert, the dress had to be repaired. Not able to get the stain out, the seamstress creates a fold in order to conceal it. Claire Jaquier argues that Marianne's acceptance of the dress, dirtied and repaired as it was, is deeply symbolic. The repair both discloses and conceals the spot as well as Julianne's fault. Julianne initiates the story of the dress/desire which she will hand to Marianne who will wear it.⁷⁶ By accepting the dress, insists Jaquier, Marianne also signals her approval of Julianne's desire as well as gives rise to her own. In a very interesting game of substitution and naming, the three characters happen to be linked within the very first story, the story of the dress as each one of them retells the story to their respective correspondent. The story of the characters's desire is hidden beneath the story of the dress which assumes from now on center-stage not only as a token of recognition but as the prime mover of the story. This shift of emphasis from the characters onto an object marks the difference between Rousseau's and Charrière's representation of desire. In La Nouvelle Héloïse, desire is most often represented by confessions. Julie confessed her love not only to Saint-

⁷⁶ Claire Jaquier, "Le damier, la harpe, la robe salie: médiations et symboles du désir dans l'oeuvre romanesque d'Isabelle de Charrière," Une Européenne: Isabelle de Charrière en son siècle. Colloque de Neuchâtel, 11-13 novembre 1993 (Hauterive-Neuchâtel: Gilles Attinger, 1994), 180.

Preux, but also to her husband Wolmar. With her confession, Julie avoids making any judgment and defers the authority first to Saint-Preux then to her husband. By contrast no confessions are made in Lettres neuchâtelaises. The characters of this novel seek to assert their authority not by confessing but by articulating their judgment. Unlike Rousseau's Julie, Charrière's characters seek to exercise their autonomous power of judgment and rely on reasoning to find a way out of the confusion in which their desire throws them. This autonomous practice is alluded to in Marianne's last name: De la Prise. Marianne is both the agent of her own judgment, as it is expressed in her name ("prise de conscience") as well as the "mastermind" of the events ("prise de la situation en main"). Marianne's name takes on value as it circulates between two registers, the register of proper name and the register of common names. This circulation of the name could be seen as a metaphor for Lettres neuchâtelaises, as it circulates between the semantic register of the proper text La Nouvelle Héloïse and its own narrative appropriation:

Il y a quelque temps qu'une petite tailleuse laissa tomber dans la boue une robe qu'elle me rapportait : un jeune étranger lui aida à la relever, accompagna jusque chez elle la petite personne, l'excusa auprès de ses maîtresses et lui donna de l'argent en la quittant. L'histoire m'en fût faite le lendemain; elle me plut, j'y voyais de la bonté et une sorte de courage ; car la petite fille, jolie à la vérité, est si mal mise et a si mauvaise façon qu'un élégant un peu vain ne se serait pas soucié d'être vu avec elle dans les rues. Je demandai le nom du jeune homme ; elle ne put pas me le dire, et je n' en entendis plus parler.

L'autre jour, étant au concert, mes voisines me montrèrent . . . un jeune homme qui jouait du violon à l'orchestre. Elles me dirent que c'était un jeune Allemand du comptoir de M. appelé Meyer. En passant auprès de lui pour aller chanter, je le regardai attentivement ; lui aussi me regarda; je vis qu'il reconnaissait ma robe. Moi, je reconnus la physionomie que devait avoir celui qui l'avait relevée et nous nous perdîmes si bien dans cette contemplation l'un de l'autre. . . . (VIII, 67)

Marianne's letter recounts what Julianne had already narrated. Multiplying the descriptions of the event, the letters multiply the consequences. The occasion of Meyer's gallant help aroused Julianne's desire but it is the narration of this episode that aroused the desire of Marianne. Julianne's desire was mediated by the appearance and money of Meyer but Marianne was more impressed by his gallantry. Marianne makes inquiries about Meyer after having heard Julianne's story. Not only does Marianne "repeat" Julianne's story, she "repeats" Julianne's actions, behaving towards Meyer in the same way as Julianne, the day she met him. Marianne looks at Meyer attentively. In her case, Meyer reciprocates. They recognize each other from the description each one has received from Julianne: "Mais pour revenir à Mlle de La Prise qui monte à l'orchestre, quoiqu'il fût très simple qu'elle portât son nom et qu'elle eût mis la robe que je savais lui appartenir . . ." (53). The dress circulates between the characters allowing them to "recognize" not so much one another as one another's story, and to differentiate between each other's stories too. At this point in the novel, Julianne writes to her correspondent again, adding some details as to the continuation of the story. This time Julianne mentions the fact that Meyer gave her some money and bought her a piece of jewelry. Julianne specifies that it was a "petit écu." As Julianne returns to work, she proudly exhibits the jewel. The reaction of Julianne's employers is immediate dismissal on the grounds of a lack of modesty. Julianne is dismissed for receiving a "gift" that was understood by her employers as a compensation for Julianne's loss of virtue. Her employers assume that Julianne gave herself to Meyer. Now, without a job, Julianne makes an appeal to Meyer, the provider of the "poisonous" gift. One day, she goes to

his dwelling in order to collect some money. Julianne sleeps with Henry and becomes pregnant. Now the conjectural fall ascribed by the employers to Julianne becomes a fact. Ironically, it is Julianne's employers' moral concerns that resulted in her being plunged into an "immoral" situation.

In Lettres neuchâtelaises Charrière radically recasts Rousseau's rhetoric of seduction and fatal error. The pregnancy outside of wedlock which had confirmed the moral fall of Julie is absent in Lettres neuchâtelaises. Pregnancy is a mere event, a fact and not the confirmation of a moral fall. In La Nouvelle Héloïse, Julie's pregnancy is paid for dearly. Confronting her father's wrath, she falls on the stairs, loses the child, and has to marry M.de Wolmar, her father's choice to restore her morals. And it is only in the total abnegation of her desires, that she found redemption, gained moral value, but was also led to death.

In Lettres neuchâtelaises, the fall operates on two levels: It is both literal in the narrative description ("tomber dans la rue") and metaphoric (moral degeneration). The first fall, Julianne's fall in the street is the event that triggers the plot. It is emphasized by the use of the verb "tomber" twice in the same sentence: Julianne drops Marianne's dress and Julianne falls down: "[J]'ai tout ça laissé tomber et je suis aussi tombée"(47). Henri hastens to help Julianne. Later on, Marianne, recognizing Henri at a concert, drops her music, "Marianne laissa tomber sa musique, sans que j'eusse l'esprit de la relever"(53). Both Julianne and Marianne are described as "letting" drop something, in Julianne's case, the dress, in Marianne's case, a music partition. To let ("laisser") followed by an infinitive indicates that the action accomplished could not be prevented

by the speaker. In Julianne's case the use of the demonstrative pronoun placed in front of the verb reinforces the failure of Julianne to prevent the fall. As Charrière appropriates the story of La Nouvelle Héloïse, the fall becomes a condition of the narrative in Lettres neuchâtelaises but not a necessary one. In La Nouvelle Héloïse, the fall of Julie is the necessary condition for the work itself to exist.⁷⁷ In Charrière's "appropriation" of the fall, Julianne and Marianne cannot fear falling because they have already fallen (both literally and metaphorically). It is the pre-condition of their existence as "rewritten" subjects. But a discrepancy in the story occurs when the representation of the social as well as the familial background of both Marianne and Julianne differs from Julie's background. For Julie, to achieve virtue meant to yield to social pressure expressed by paternal authority. Marianne and Julianne are simply beyond redemption, for they lack husbands and fathers: no authority is present to vouch for their virtue. Julianne is without paternal authority, and is fighting for herself in the marketplace. Marianne's father is a philanderer who spent all of the family inheritance and is paralyzed by gout. Trapped at home, he is unable to direct his affairs, and only enjoys listening to his daughter play music. Meyer is the only one who has a relative who not only provides for him but is open minded enough to make arrangements to take care of Julianne and Meyer's child, insisting on the child's welfare and its well-being and thus reversing the law of paternity. This sequence of reversal is pursued by Charrière

⁷⁷In Confessions, Rousseau wrote about Julie: "Mais qu'une jeune personne née avec un coeur aussi tendre qu'honnête se laisse vaincre à l'amour étant fille, et retrouve étant femme des forces pour vaincre pour le vaincre à son tour et redevenir vertueuse: quiconque vous dira que ce tableau dans sa totalité est scandaleux et n'est pas utile, est un menteur et un hypocrite; ne l'écoutez pas" (435).

when instead of any of the female characters, it is Meyer, the male character who fears to make the "faux pas": "Je craignais de faire encore quelques sottises. Peut-être, aurais-je fait un faux pas en descendant le petit escalier et l'aurais-je fait tomber"(53). Unlike Saint-Preux, Meyer is unable to implement the encoded script of seduction.

In Lettres neuchâtelaises literary myths and traditional eighteenth-century plots come into play in a very interesting way. In her narrative Charrière exploits readers' expectations based on the traditional novel where one "faux pas" made by a female character can seal her destiny. What is expected in the logic of the "faux pas" is a downward spiral leading from good to bad, from joy to despair, from prosperity to poverty. The "fall" takes on the metanarrative function of announcing prophetically the misfortunes of the heroines: misfortunes at once moral, emotional, social and economic. Therefore in these novels, once the story of the fall begins, it can not be arrested by the victim. However Charrière's Lettres neuchâtelaises subverts the expectations of the reader.

In Charrière's Lettres neuchâtelaises, a connection could be made between the fall on the street and the subsequent "moral" degradation, which take place as sibling effects of a common cause: Women's sensibility. But "tomber" comes back to haunt the text. Charrière invites us to distinguish between the literal and the metaphorical status of the fall, and in one of the last letters, she brings the three characters together, all of them afraid that they will fall on the icy road:

Il nous fallait toute notre attention pour ne nous pas laisser tomber. Juge de l'embarras et du danger de Mlle de LaPrise et de deux autres demoiselles que nous trouvâmes près de la porte de la ville, allant le même chemin que nous. Je m'arrêtai devant elles; je crois que je voulais les empêcher d'avancer croyant voir

déjà Mlle de La Prise sur le pavé, blessée, meurtrie, quelque chose de pis peut-être. . . . Nous marchions sans rien dire, ne pensant qu'à ne pas tomber...lorsque j'ai vu une jeune fille que j'ai connue par hasard, à qui de petits garçons jetaient des boules de neige pour la faire tomber. Elle m'a reconnu. Son air exprimait toutes sortes d'embarras. C'était le visage de la détresse; . . . Elle était dans un véritable danger. Elle aurait pu tomber contre une borne, contre le coin d'une maison. C'est la première fille à qui j'ai parlé à Neuchâtel, et je lui avais donné du secours dans une occasion beaucoup moins grave. Je ne connaissais pas alors Mlle de la Prise. Fallait-il à présent la dédaigner et la méconnaître? (VIII, 73)

In Lettres neuchâtelaises, the simple system of antitheses present in La Nouvelle Héloïse (between fall and regeneration, moral and immoral, feminine and masculine) breaks down. And under the weight of so many paradoxes, the maxims on which such a moral system is built collapse from within the narration. Marianne and Julianne have emptied Rousseau's moral metaphor: Julie de Wolmar. They are both discordant images of a "wife" or a "mistress." But without the story of Julie, we would not have been able to read them as such. Charrière's narration has emptied the discussion of morality in psychological terms and shifted the interpretation of morals within the discursive space of narration. The characters of Lettres neuchâtelaises are unable to reclaim a similar moral identity as Julie. Hence, extracted from the original moral scenario of La Nouvelle Héloïse, the characters of Lettres neuchâtelaises can refigure moral "expectations." The last inversion of La Nouvelle Héloïse' story (where Julie's child dies as a result of miscarriage) occurs when Julianne's child is not only granted life but the future opportunity to choose and accept his father:

Je sais qu'à Neuchâtel la manière dont on baptise un enfant constate son état : je ne veux pas que le vôtre soit élevé dans cette triste connaissance; s'il l'acquiert quelque jour, ce sera lorsqu'il aura lieu d'être assez content de son existence pour ne vous la pas reprocher, et lorsque vous vous serez rendu assez recommandable pour qu'il préfère sa naissance, malgré la tache qui l'accompagne, à toute autre naissance, et qu'il vous choisît pour père s'il pouvait choisir. Il ne tient qu'à vous

Henri. d'ôter à force de vertu, l'opprobe de dessus votre fils ou votre fille.
Demandez-vous à vous-même si vous y êtes obligé. (VIII. 82)

In this inversion, it “falls” to Henry to regain his “virtue” by removing the disgrace placed on his child by being born out of wedlock. To ensure their meanings as “moral beings,” the characters of Lettres neuchâtelaises have revolutionized a rhetoric of love that would result in either destruction or marriage. Their relationships cannot be expressed in terms of the traditional idealizing rhetoric of love and marriage, but can only function in terms of liability, judgment and autonomy. In a characteristic critical gesture, Charrière stops short of giving the moral of the story, and leaves it to the reader to re-assess the moral and narrative configurations of La Nouvelle Héloïse in the light of the fictional performance she staged in Lettres neuchâtelaises.

Third Chapter: Trois femmes : A Fictional Response to Kant's Concept of Duty

In the light of Charrière's preoccupation with morals, we will now examine her Trois Femmes, a philosophical tale exploring the concept of duty.

Charrière's Trois Femmes received bad reviews when it was first published in 1795. The novel was perceived as immoral. Certain passages were simply censored. "Tout était mutilé," recounts Charrière about the publication of Trois femmes, "On n'a jamais été plus barbare, ni plus ridicule, je dirais presque aussi, plus hypocrite" (IX, 27).⁷⁸ In a letter written to her friend Henriette l'Hardy, Charrière recounts how her Trois Femmes were finally judged by the French critics. Besides considering Kant's moral philosophy, Charrière states that there was a practical aspect to the writing of Trois Femmes. She wrote Trois Femmes in order to provide money for a destitute émigré friend in England. The sales of the book should have gone to her friend:

Il y a en Angleterre une autre émigrée qui n'aurait pas moins besoin que Mme de Flaho d'une ressource de ce genre: L'idée m'est venue d'essayer de la lui procurer, et j'ai écrit "trois femmes" ... La scène est en Allemagne, les trois femmes sont françaises. C'est une catin, une friponne et une begueule, dit M.de Roussillon. Vous voyez bien mes dames que vous n'y êtes pour rien. Malgré cette belle analyse ou définition M.de Roussillon aime fort mes trois femmes. "(IX, 24)

Charrière's moral tale became an immoral story in the eyes of the public. What caused such condemnation? As Charrière ironically points out, Roussillon ruled against the women with criteria and rules of morals already given. Roussillon judges women by

⁷⁸As to the publication history of Trois Femmes, see the introduction to the text vol. IX, pp. 23-34. Charrière had her story printed three times, it was badly mutilated, considered immoral and her "trois femmes" were judged as "une catin, une friponne et une bégueule" (24).

attributing negative qualities to their nature instead of making a critical assessment on their actions. In the case of Roussillon, preconceived ideas seem to control his interpretation of Trois Femmes. His failure to judge results from the limits of his moral discernment, the limits imposed by his knowledge of “what a moral woman should be.” Kant had challenged this dogmatic approach to moral philosophy. Instead of judging an action on the basis of an a priori idea of what “good” is (and, in that case, what a good woman is), Charrière follows Kant’s call for “a Copernican revolution in ethics.” Kant demanded that the moral law define the concept of the good and not the other way around. In Roussillon’s judgment, Charrière’s women are judged not on the basis of conformity of their actions to the moral law but with regard to some abstract (Kant would call it dogmatic) moral nature.⁷⁹ Thus, the reception of Trois Femmes tells a story of a profound misunderstanding of the novelty of Charrière’s critical (in Kant’s sense) approach to morals.

This type of reading extends to modern critics of Charrière’s novel as they interpret Trois Femmes as a fictional representation of social conditions of women’s

⁷⁹ In “It Makes Us Wrong, Kant and Radical Evil,” in: Radical Evil Copjec, Joan, ed. New York: Verso, 1996, Jacob Rogozinski writes: “the imperative prescription of the Law stands apart from the typical prescriptions in which it is dispensed, and it can only arrive at self-figuration in an indirect analogical mode through the bias of symbols, those ambiguous traces which it leaves for us to decipher. Practical judgment, far from being reduced to a schematic application of pre-established universal determination, is at every turn played out in a singular set of givens-in the testimony of an experience in which what is unrepresentable in the Law is presented aesthetically.”p. 134 . Charrière’s esthetic experiments may offer singular examples which as we will examine testify to the moral law.

lives in the 18th century.⁸⁰ Such critics tend to see in the work of Charrière what may be characterized as a “feminocentric” agenda. Such an approach emphasizes Charrière’s descriptions of inequalities between sexes and her desire to expose these inequalities in her writings. Carla Hesse’s “Kant, Foucault and Three Women” is a good example of contemporary criticism of Charrière. She begins by referring to the lack of critical attention brought to the novel Trois Femmes. For Hesse, the lack of attention to the philosophical dimension of Charrière’s works is due to “a series of generic distinctions between academic and commercial culture, between philosophy and literature, and between men and women’s writing that were emerging precisely at the moment in which the two authors in question were writing”(85). Hesse reads Trois Femmes as an attempt to rewrite Kant’s philosophical inquiry into morals “that is not only critical but genealogical in form ... and allows us to examine the part played by sexual difference in the fabrication of the post-Kantian philosophical subject”(85). Such a definition assumes that Charrière had a dogmatic project which consisted in the establishment of a modern subjectivity based on sexual difference or that she denounced Kant’s moral philosophy because of its sexual bias. However, this approach treats Kant’s concept of duty as if he developed it in terms of moral agents rather than moral law. In the introduction to the Foundations for the Metaphysics of Morals, Kant condemns such approach as dogmatic. He wants to find the a priori principle that regulates moral life of rational beings regardless of the conditions of its application. In this regard, we would

⁸⁰Allison sees the novel Trois Femmes as “a feminocentric novel.” She also affirms that in Trois Femmes Charrière explores the implications of a highly charged manifestation of woman’s difference, i.e., pregnancy (14).

argue that Charrière's choice of three women as protagonists for her novel reflects Kant's search for a universal and a priori moral principle.

By introducing three women as free moral agents without family, without country and with money, Charrière doesn't only destabilize the moral expectations of her readers in terms of a "proper" position for a woman, but she redirects their attention to the question of "pure" moral judgment. Of course, Charrière's women are defined in terms of their contingency with respect to the moral laws, but these laws have nothing to do with the moral law in Kant's sense; they are just customs imposed upon them by their historical circumstances rather than a tendency presupposed in their rational nature. We will examine how Charrière's writing will make these women enact the difference between the inherent moral law (the categorical imperative) and external laws (principles of virtue which women are expected to follow).

But Charrière's use of women as moral agents able to perform moral actions is a "scandal" even from Kant's point of view. Since women usually do not fully participate in the law either as legislators or enforcers, their positions in the social order as mothers, sisters or wives forbid them to become autonomous and self-determined beings, conditions that are indispensable to moral subjects. For Kant, to become moral one has to be free to determine oneself:

But now we see that when we think of ourselves as free, we transfer ourselves into the intelligible world as members and know the autonomy of the will the question of morals together with its consequence, morality: whereas we think of ourselves as obligated, we consider ourselves as belonging to the world of sense and yet at the same time to the intelligible world. (Ethical Philosophy, 54)

Choosing women to express the problem raised by Kant's concept of duty is a bold gesture typical of Charrière's strategy of hybridization of several discourses. This chapter will try to demonstrate that Charrière's hybridization of Kant is guided by a coherent and incisive line of reasoning that has lost none of its urgency and appeal even today.

Charrière's concern with morals goes back to the discussions she held in her "salon" in Neuchâtel (Switzerland). There, Charrière frequented French émigrés of the Revolution and cosmopolitan intellectuals of the time, such as Thérèse Forster, Ludwig Huber and Benjamin Constant. A close friend of James Boswell and Benjamin Constant, an avid reader of John Locke, David Hume, Jean Jacques Rousseau and Immanuel Kant, Isabelle de Charrière never engaged in what may be described as "professional" philosophical work, but her literary fictions and other works are inextricably tied to the philosophical debates of the late eighteenth century.⁸¹ In the 1790's, Charrière became interested in Kant's moral philosophy. She was introduced to it by Ludwig-Ferdinand Huber (1764-1804), a student of Friedrich Schiller. In the fall of 1794, Huber began to plan a French translation of Kant's Perpetual Peace and excerpts

⁸¹In the Writing of History, Trans. Tom Conley.(New York: Columbia University Press, 1988), Michel de Certeau remarks that a breach between religion and morals was produced by the end of the eighteenth century, which had for consequences that social life and scientific investigation are "exiled from religious allegiance" (p. 149). Thus an autonomous ethics is established whose frame of reference is either conscience or the social order. As Rousseau wrote for the Encyclopedie "morality wins over faith ... because all morality ... is of an unchanging nature and will last into all eternity, when faith will subsist no longer and be changed into conviction ." She also recognized that morals is "exiled" from religion, and in her own way she will recounts this exile in her epistolary novels.

from On the Proverb: That May be True in Theory But is of No Practical Use.⁸² Carla Hesse insists that the encounter with On the Proverb: That May be True in Theory But is of No Practical Use served as the inspiration for Charrière's composition and publication in 1795 of her novel Trois Femmes.

However, as the following quote makes clear, the span of Charrière's preoccupations goes well beyond this incidental article and concerns the concept that is the cornerstone of Kant's entire moral philosophy, the concept of duty:

C'est un petit traité du devoir mis en action ou plutôt illucidé par une action. On n'a pas prétendu donner des modèles à suivre mais montrer des vices et des faiblesses à excuser comme non incompatibles avec une idée ou un sentiment de devoir et une moralité dans la personne coupable ou excusable. (V, 354)

Before proceeding to examine Charrière's hybridization of Kant's duty in the main body of Trois femmes in the next section of this chapter, I would like to trace her appropriation of this concept in her correspondence and drafts. In a letter to Benjamin Constant written during the period when she was conceiving Trois Femmes, Charrière gives an important clue of Kant's categorical imperative:

J'ai dit depuis que je sais parler que je ne trouvais dans aucun système de théologie ou de droit naturel ou de morale sociale ce qui fait le devoir. Je ne vois partout que des calculs d'intérêt, ou bien des commentaires des développements d'une idée qui n'est définie nulle part. Kant dit qu'elle est simple et ne peut se décomposer ni s'expliquer parcequ'elle est simple; c'est ce que j'ai cru aussi le plus souvent, et quelque fois j'ai cru qu'elle pouvait se définir, s'expliquer, parcequ'elle était au contraire trop compliquée. La chose est de l'une ou de l'autre de ces deux manières." (IX, 670)

Her discovery of Kant's moral philosophy led Charrière to draw a schema of duty in

⁸²Carla Hesse, "Kant, Foucault and Three Women" in: Foucault and the Writing of History, ed. Jan Goldstein (Cambridge: Blackwell, 1994).

which she places at the top of the sheet the word *Devoir*, under which she writes in one column : “devoir éternel et n’ayant ni père ni collatéraux, ni enfants.” This sentence parallels another sentence which reads “ce qu’il convient à chacun de nous que les autres fassent.” which is itself divided in two columns one “loix” the other “opinion publique.” Both “loix” and “opinion publique” are regrouped under the heading “habitudes de nos jugements,” itself separated in four categories: “education,” “bienséances,” “avantages résultant de l’estime” and “Louanges qui promettent estime et amitié.” These four categories are again regrouped under the heading “Conscience” which is placed under the category of “devoir” followed by an interrogation point:

Devoir éternel,

Et n’ayant ni père

Ni collatéraux,

Ni enfants.

Ou

Ce qu’il convient

À chacun de nous

Que les autres fassent.

Loix

Opinion publique

Habitude de nos jugements

Education, bienséance, avantages résultant de l’estime Louanges qui promettent
estime et amitié

Conscience,

Devoir ? (IV. 671)

In a less cryptic letter to Ludwig Huber, Charrière states: “M. Constant est ainsi que moi de l’avis de Kant qu’on ne saurait mêler à l’idée de devoir, l’idée d’aucun avantage attaché à remplir un devoir qu’on ne détruise son essence” (IV, 681). Charrière does not cite the works of Kant she has read, however, her preoccupation and her genealogical sketch of the concept of duty shows that she was well versed in Kant’s specific writings on morals such as Foundations of the Metaphysics of Morals, Critic of Practical Reason and Metaphysics of Morals. In the above sketch, one can also see Charrière introducing the concept of conscience alien to Kant into her reflections on his moral philosophy.

In Charrière’s schema duty is separated from conscience and placed under it. Why would Charrière make use of a word conscience with its strong Christian connotations? Perhaps, she wants to give a more popular equivalent to Kant’s formulation of duty, or she means that conscience better than “duty” indicates the presence of the reflective process of the pure moral judgment. With the term conscience, Charrière marks her difference from Kant in regard to ethical actions. An ethical action, as Kant defines it in the Foundations of The Metaphysics for Morals, consists in a purely formal act, that is done solely for the sake of the law:

A maxim is the subjective principle of acting and must be distinguished from the objective principle, viz., the practical law. A maxim contains the practical rule which reason determines in accordance with the conditions of the subject (often his ignorance or his inclinations) and it is thus the principle according to which the subject does act. But the law is the objective principle valid for every rational being, and it is the principle according to which he ought to act, i.e. an

imperative.”(Ethical Philosophy, 30)

Morality according to Kant implies that we act not only in accordance to the law but for the sake of the law. If the moral action has a feeling (fear of punishment, desire to conform, etc.) as “the determining ground of will,” it will only possess legality but never morality. Moreover, as Kant goes on to state, morality cannot be explained since it is immanent to reason and therefore cannot be cognized “theoretically,” i.e., as an object of nature:

It is clear that all moral concepts have their seat and origin completely a priori in reason. They cannot be abstracted from any empirical, and hence merely contingent, cognition. In this purity of their origin lies their very worthiness to serve us as supreme practical principles. (Ethical Philosophy, 23)

In Kant’s moral vision of the world any rational being inherently possesses morality. By making women the main participants of her experiment with Kant’s moral philosophy in Trois Femmes, Charrière suspends the notion of rationality (since women are often represented as lacking on that score) and questions the continuity between the rational, the moral and the legal assured by Kant’s deductive procedure. Charrière insists on the discontinuity between all these properties when the moral practice is at stake. Her three women are Kantian moral agents and as they commit moral actions one by one, they ask themselves what makes their actions moral over and over again. What Charrière illustrates in choosing to represent the imperative in the form of three women is that once discovered the imperative doesn’t stay with a rational being forever neither is it presupposed by the nature of a rational being. A moral principle such as the categorical imperative does not suffice to guarantee that each and every action will be moral. Each moral action implies that one has to repeat the question: Was this moral action done for

the sake of the moral law? Charrière's insistence on the discontinuity of moral actions, and the need to always ask oneself about one's moral action shows that Kant's concept of duty can be read as precluding the apriori aspect of the ethical. In Charrière's reformulation of the categorical imperative the universal formula of duty takes the form of the singular. It is a principle which has to be renewed each time a rational being is about to act. As Charrière's narrative will seek to demonstrate, there is no a priori moral nature but only singular moral actions whose very singularity assures their universal quality.

In "Kant with Sade."⁸³ Lacan argued that Kant, by excluding any pathological motive from a moral action, indicates that one has to persist in following the categorical imperative, regardless of pain and pleasure that may occur along the way, as a result by ridding oneself of any pleasure or pride in the moral action one finally reaches the goal of acting in accordance with the universal principle. If such is the case, argues Lacan, than a Kantian ethical subject resembles a Sadian libertine. In Lacan's reading of Kant, the Kantian moral law has the structure identical to the desire in its pure state which means that the subject of the law should not succumb to the satisfaction afforded by conventional morality. Kant had formulated the concept of duty as independent of any external sources, but dependent only on the subject's will to wish duty as universal following the principle according to which "all maxims are rejected which are not consistent with the will's own legislation of universal law. The will is thus not merely

⁸³Jacques Lacan, "Kant avec Sade," *Ecrits II* (Paris: Editions du Seuil, 1971) 119-148.

subject to the law but is subject to the law in such a way that it must be regarded also as legislating for itself and only on this account as being subject to the law (of which it can regard itself as the author)” (Ethical Philosophy, 38). Kant’s concept of duty leads Charrière to predicate the accomplishment of a “pure” ethical act on conscience. Charrière’s “conscience” implies that moral agent has to question not simply the act but to think the will, the desire for acting. Through this reflexive action, the moral agent will be “trans-formed.” In Kant’s statements, moral action is also reflexive, since moral agents have to ask themselves “if their actions accord to such maxims as they can themselves will that such should serve as universal laws?” (34). However, they are not transformed by their actions since they merely execute what corresponds to the principle that has been established as universal. Unlike Kant’s executioners of the law, Charrière’s moral agents have to bear responsibility not simply for their actions, but for the decision to call an action, a moral action. The “conscience” mentioned in Charrière’s letter to Benjamin Constant, therefore, goes beyond its theological connotation and does not stand for an appeal to an existing law. “Conscience” becomes the reflexive gesture willed as a necessary component of each moral act. However, Charrière does not expound these views in the form of a philosophical treatise. Instead she chooses to represent the interweaving of duty and conscience by means of literature. Kant’s blueprint of moral actions functions as an exemplary model and indispensable intertext for Charrière’s *mise-en-oeuvre* of “duty” in Trois Femmes.

Charrière picks up the concept of duty where Kant’s elaboration stops, i.e., with the problems of exemplarity and practicability of “pure” moral law. Even though

Kant managed to prove the existence of such law. his philosophy provided no clue as to how to practice it. For Charrière, practicability of the law is not incidental to it, neither is it a matter of “subjective” choice. On the contrary, without a theoretical understanding of practicability of the moral law, any such law would remain fundamentally absent from social practice, and, therefore, speculative and ineffectual. Charrière reformulates the question of morals so that examples become central. Kant, on the other hand, insisted that examples “fail to lead to ideas” because they are merely empirical. “We must follow,” says Kant “and clearly present the practical faculty of reason from its universal rules of determination to the point where the concept of duty springs from it.”⁸⁴ But for Charrière moral laws, and more particularly, the concept of duty cannot be separated from the question of examples.

For Kant, reason is an apriori source of obligation. From his point of view rational beings have access to moral principles and concepts simply in virtue of their rational nature. According to Kant’s Foundations of the Metaphysics of Morals, it is the concept of duty (rather than virtue) that best captures the apriori nature of the inherent morality of reason. In accordance with the metaphysical presupposition above, Kant

⁸⁴Immanuel Kant, “Grounding for the Metaphysics of Morals,” in Ethical Philosophy, Tr. James W. Ellington, (Indianapolis, Cambridge: Hackett, 1983), p. 23. From now on, all quotes from the Grounding for the Metaphysics of Morals will be taken from this edition and cited in the text. For analysis of Kant’s theories of morals, see Onora O’Neill, Constructions of Reason, (Cambridge: Cambridge University Press, 1989); Christine M. Korsgaard, The Sources of Normativity (Cambridge: Cambridge University Press, 1996); Dieter Henrich, Aesthetic Judgment and the Moral Image of the World, (Stanford: Stanford UP, 1992); Radical Evil, Ed. Joan Copjec, (New York: Verso, 1996); Jean-Luc Nancy, L’Impératif catégorique, (Paris: Flammarion, 1983).

proceeds to examine and discard “popular moral ideals.” i.e.. moral doctrines that implicitly or explicitly rely on experience:

But such a completely isolated metaphysics of morals, not mixed with any anthropology, theology, physics, or hyperphysics, and still less with occult qualities is not only an indispensable substratum of all theoretical and precisely defined knowledge of duties, but is at the same time a desideratum of the highest importance for the actual fulfillment of their precepts.” (Ethical Philosophy, 22)

For Kant, it is important to disentangle the concept of duty from the forms it takes in history and to know it as a universal axiom. Only a rational being adopting maxims can be moral or immoral. Kant’s task is to find a method of distinguishing between moral and immoral maxims which, as he stated in the preface of the Foundations, would be “the supreme principle of morality.” He considered it accomplished with the notion of “categorical imperative.”

For Kant, the categorical imperative is not only a formal principle of morality but also guarantee of its universality: “Act only on that maxim through which you can at the same time will that it should become a universal law.” The imperative is a directive to act a certain way which forbids what is inconsistent with that directive. Morality demands that we apply on all sorts of policies, but it is solely through the application of the categorical imperative that a community of free rational agents can be generated.

In accordance with her emphasis on practicability, Charrière examines Kant’s categorical imperative not so much in terms of its conceptual attributes but from the point of view of the problem of its representation in the world of action. And it is through the literary mode that Charrière is going to give forms to the categorical

imperative. One could say that in her literary practice she submits the categorical imperative to the esthetic one, and, more importantly, argues for the inevitability of such superimposition. In the introduction to Trois Femmes, one of the protagonists raises the issue of writing⁸⁵:

“Pour qui écrire désormais?” disait L’Abbé de la Tour. Pour moi, dit la jeune Baronne de Berghen. On ne pense on ne rêve que politique, continua L’Abbé. J’ai la politique en horreur, répliqua la Baronne, et les maux que la guerre fait à mon pays, me donnent un extrême besoin de distraction. J’aurai donc la plus grande reconnaissance pour l’écrivain qui occuperait agréablement ma sensibilité et mes pensées, ne fut-ce qu’un jour ou deux. Mon Dieu! Madame, reprit L’Abbé après un moment de silence, si je pouvais ...?Vous pourriez, interrompit la Baronne. Mais non, je ne pourrais pas, dit L’Abbé; mon style vous paraîtrait si fade au prix de celui de tous les écrivains du jour! (IX, 41)

The above exchange between l’abbé and la Baronne reiterates the traditional opposition between writing as a political act and writing as a merely rhetorical exercise. L’abbé, the future narrator of the story of three women, speaks out in favor of writing that transgresses the poetics of distraction and bienséance demanded by the Baronne.

⁸⁵To represent duty involves for Charrière not only a preoccupation with the meaning of the words but with the tone and the style, Writing to Benjamin Constant, she insists on the rhetorical attention, one should address to one’s thought when writing: “Quand votre tache ne serait pas immense, je serais capable peut-être de vous aider à la remplir et si vous daignez entreprendre un petit ouvrage de quelque genre qu’il puisse être je lirai, critiquerai, je ferai tout ce qu’il vous plaira, comme si vous voulez que pour votre amusement j’écrive quelque chose vous n’avez qu’à dire, et je rendrai ce quelque chose le plus agréable pour vous qu’il me sera possible. J’habillerai de mon mieux mes pensées, non d’oripeaux toutes fois, ni de quelques grosses étoffes d’or qui cachent les formes plus que ne doit faire une draperie. Telle qu’une bergère aux plus beaux de fête [sic] ma modeste pensée se parera pour vous des fleurs qui lui conviendront. (IV, 648)

However, l'abbé does not want to displease the Baronne either.

In an ironical reversal Charrière submits the principle of moral laws (which should be beyond any "pathological" considerations such as pleasure or pain) submitted to the imperative of fiction: to please. Charrière's introductory reflexions on the possibility of representing the categorical imperative raises the question of Darstellung (presentation). Preoccupied by the imperative to please, the Abbé shows much concern with language. Indeed, what language can be used to tell the story of duty, especially of the "pure," Kantian sort? What presentation (Darstellung) does a priori principle of morality admits if any? Thus, l'abbé's preoccupation with style answers a philosophical exigency of adequate presentation (of the moral law) at the same time as it seeks to entertain his audience. L'abbé answers these questions by means of the following metaphor:

Mon style vous paraîtrait si fade au prix de celui de tous les écrivains du jour!
Regarde-t-on marcher un homme qui marche tout simplement quand on est accoutumé à ne voir que tours de force, que sauts périlleux? Oui dit la Baronne, on regarderait encore marcher quiconque marcherait avec passablement de grâce et de rapidité vers un but intéressant. J'essayerai, dit L'Abbé. Les conversations que nous eûmes ces jours passés sur Kant, sur sa doctrine du devoir, m'ont rappelé trois Femmes que j'ai vues. (IX: 41)

The Abbé compares his narration of duty to a man walking "quite simply." Charrière will later continue to anthropomorphize the concept of duty when she compares the categorical imperative to an idea without parents, collaterals or children in her correspondence. With this metaphor, Charrière reminds us of Kant's requirement that the categorical imperative be judged on its own, i.e., as an orphan. But let us come back to the matters of style since, in Charrière's narrative transcription of Kant's

transcendental method, the discussion of the form that would guarantee the practicability of the categorical imperative must precede or anticipate the discussion of the imperative itself. In the Abbé's metaphor for style, man becomes a paradigmatic figure for the categorical imperative. Analogous to a man walking, the categorical imperative animated now with aesthetical and anthropological attributes should invite comparison with men not in repose but in action. By representing the categorical imperative in an aesthetically pleasing form, Charrière hopes to entice the reader to the categorical imperative. Duty has to please. Thus, even as Charrière's text reiterates Kant's question, it exceeds a precise determination of the concept of duty by casting it in aesthetic fictionalized form. She will pursue a similar strategy when it comes to the three formulations of the categorical imperative in Kant's Foundations. The categorical imperative was expressed under three abstract propositions in the Foundations: First, "that an action must be done from duty in order to have any moral worth"; second, "that an action done from duty has its moral worth not in the purpose that is to be attained by it, but in the maxim according to which the action is determined," and, third, "that duty is the necessity of an action done out of respect for the law." Since the categorical imperative has to be linked to practicability, if the categorical imperative is to assume the universal function that Kant proposed for it, in Charrière's work duty has to become a poesis, it has to be written and narrated, that is, to undergo a rhetorical transposition. When it comes to metaphorizing these three postulates, the Abbé performs a gender inversion on the previous metaphor by comparing them to three women:

Les conversations que nous eûmes ces jours passés sur Kant, sur sa doctrine du devoir m'ont rappelé Trois femmes que j'ai vues. Où? Demanda la Baronne.

Dans votre pays même en Allemagne, dit L'Abbé ... Je me suis convaincu auprès d'elle qu'il suffit, pour n'être pas une personne dépravée d'avoir une idée quelconque du devoir, et quelque soin de remplir ce qu'on appelle son devoir.
(IX: 41)

Taking stock of Charrière's gendering of her metaphors, we can see that they are divided along the line separating form from content: If the style of the categorical imperative has to be "manly," "simple," "graceful" and "direct," its content is "feminized" by being represented in the guise of three women. This triple aspect of the categorical imperative brought Hesse to argue that the images of women in Trois Femmes should be examined against the background of Kant's Theory and Practice in which Kant illustrates the three maxims of the categorical imperative by the figures of three men, "the man of affairs," represented by Charles Garves, the "statesman," represented by Thomas Hobbes and the "man of the world" represented by Moses Mendelssohn. Kant's purpose, says Hesse, "is to demonstrate that the apriori categorical imperative can and should be sustained not only in theory but also in practice by men in the real world"(91). From Hesse's point of view, Charrière's Three Women is nothing more than a counterexample to Kant's essay rather than a sustained argument developing the implications of his entire moral philosophy. But, as we have seen above, Charrière' substitution of duty first for a man and then for three women does more than simply illustrate Kant's moral precepts or the structure of his argument. Rather, it relies on a fundamental reflection on the possibility of the imperative.

In addition to anthropomorphizing Kant's moral theory with her metaphors, Charrière also frames the concept of duty within an act of recall and remembrance: "La

doctrine de Kant sur le devoir m'a rappelée trois Femmes." What the concept of duty evokes for the Abbé is the memory of three women of his acquaintance living in a foreign country. Before talking about duty the Abbé has to set a context in which moral judgments can be at work. The fiction of duty is proposed as a result of the historical event (the French Revolution). History intrudes to contextualize the abstract treatment of duty, to mark its temporal aspect. The intervention of history in the novel Trois Femmes is already a comment on the temporal limits of any concept of duty:

Je me suis convaincu auprès d'elles qu'il suffit, pour n'être pas une personne dépravée, immorale ou odieuse, d'avoir une idée quelconque du devoir, et quelque soin de remplir ce qu'on appelle son devoir. N'importe que cette idée soit confuse ou débrouillée, qu'elle naisse d'une source ou d'une autre, qu'elle se porte sur tel ou tel objet, qu'on s'y soumette plus ou moins imparfaitement; j'oserai vivre avec tout homme ou toute femme qui aura une idée quelconque du devoir. (X. 41)

What can be deduced from these lines is that there is no truth of duty that can be offered . as long as someone reflecting and possessing an idea of duty is enough for the abbé. The characters react to the Abbé positing of duty as a "simple idea [une idée quelconque du devoir]" and propose their own understanding of the a priori "duty":

Vous oserez vivre avec tout le monde, dit un sectateur de Kant; car c'est une idée universelle et pour ainsi dire innée. Cela vous plait à dire, s'écria un théologien: la manifestation seule de la volonté divine peut nous la donner. Quel besoin si absolu avons-nous de cette manifestation, dit un homme qui n'était pas théologien, quand la connaissance de nos intérêts particuliers et de ceux de la société, qui sont les nôtres aussi, suffit pour nous imposer des devoirs et nous donner d'abord la volonté puis l'habitude et le besoin de les remplir? Tout cela n'est que calcul et prudence, dit l'homme qui avait parlé le premier, et je ne vois rien dans la prospérité de la société, ni dans la mienne propre qui me fasse un devoir de mes devoirs. Les promesses et les menaces qui regardent l'éternité sont bien plus imposantes, dit le théologien. Il est vrai reprit le Kantiste, et cependant je ne trouve pas en elles de quoi constituer le devoir. L'idée du devoir

me paraît simple. ne se composant que d'elle-même; on ne peut pas l'analyser. Elle émane de Dieu dit un jeune homme qu'à son air on aurait pris pour l'élève de Fénelon. ou plutôt notre cœur la puise dans un amour pur et désintéressé de l'Être suprême. Si elle échappe à l'analyse, dit un homme qui n'avait encore pas parlé. ne serait-ce pas parce que loin d'être simple, elle est au contraire trop complexe et se compose d'idées qui par leur action et leur réaction les unes sur les autres, se subtilisent à l'infini? (IX, 42)

As the above exchange between the participants of the discussion demonstrates, as long as it remains an ideal, duty remains susceptible to the seemingly endless array of interpretations. If the representations of this concept can expand ad infinitum, then the only possibility to think about morals is not in trying to restrict the meaning of the concept but in opening the question of the source and function of its infinite representability. This is the path Charrière is going to choose.

Charrière opens her consideration of the concept of duty in the introduction of Trois Femmes with the question "Pour qui écrire désormais?" As we have seen, answering this question involved an implicit critique and supplementation of Kant's works on moral philosophy and Foundations in particular. At the end of the introduction, Charrière offers us a panorama of different interpretations of duty. According to the theologian, it is "le courroux du ciel"; according to the Kantian, "C'est l'autorité simple, éternelle, indestructible"; according to the man of the world, "un sauvage n'éprouvera rien de semblable" (IX, 42). However, Charrière is not interested in finding which answer is the correct one. Rather, she wants to continue her questioning. That is why the exposition ends with the relativistic question followed by the imperative of writing: "Qu'en savez-vous? Dit L'Abbé. Allez écrire lui dit la Baronne."

Trois Femmes is divided into two parts: Part one is a tale recounted by its

pseudonymous author/narrator. L'Abbé de la Tour describing the moral dilemmas of three women of his acquaintance. Part two shifts into the epistolary mode and is comprised of a series of letters written principally to the author/narrator of the first part by one of the woman, Constance. The main problem that the characters are facing is how is it possible to disentangle the concept of duty from the one of happiness an indeterminate concept since Kant said, "nobody can never say definitively and consistently what it is that he really wishes and wills" (27). For Charrière, the question of happiness is tied not only to one's own undetermined ideas of happiness but mainly to preexisting principles or ideas of happiness ossified in a code of moral conduct. To do one's duty requires thus to first clear the grounds for a moral judgment. "Duty" implies that one has to know one's history of morality otherwise one risks to merely reproduce a norm instead of a moral judgment.

Thus as we just saw, for Charrière an universalization of the concept duty cannot be thought out of its historical dimension. This historical dimension becomes the metaphor for the moral law understood by Charrière as a process of reasoning:

Il faut voir en un homme, pour le pouvoir estimer, que quelque chose lui parait être bien, quelque chose être mal; il faut voir en lui une moralité quelconque. Avec ce quelconque, vous donnez une grande latitude à nos vertues ou plutôt à nos vices, dit la Baronne. Si un homme s'avisait de se permettre tout, hors de faire gras le vendredi et de travailler le dimanche, que diriez-vous de lui? J'étudierai ses facultés et m'informerai de son éducation, répondit L'Abbé; et si je voyais que de bonne fois il met plus d'importance aux observances que vous dites, qu'à nulle autre devoir, j'oserai bien le déclarer imbécile, mais non totalement immoral. (IX, 89)

L'Abbé de la Tour points to the paradox of the concept of duty which leads him to formulate that the moral law is "beyond good and evil." The categorical imperative,

says he, what is moral, is the simple fact of obeying a law that one gave to oneself in a consistent manner and that can be universalized at the same time. The Baroness is horrified since what she understands is that the concept of duty is devoid of any external normative obligation. What the reaction of the Baroness shows is that she understands moral law and needs moral law to be conceived for her and imposed on her. She needs the norms of good and evil. For the Abbé de la Tour, to be moral is strictly to display a consistent attitude towards the law. People are moral if they can show a constraint on their freedom, and a respect of laws or as Kant insisted : “For nothing can have any worth other than what the law determines. But the legislation itself which determines all worth, must for that very reason have dignity, i.e., unconditional and incomparable worth; and the word respect alone provides a suitable expression for the esteem which a rational being must have for it” (41). Duty appears as a mediating concept that links the idea of constraint and the idea of freedom. This element of respect which Charrière emphasizes in the stories of the three women brings the Kantian test of the categorical imperative into a new perspective. Far from being an abstract concept defined mainly by its vagueness and its sense of obligation, the categorical imperative seems to be the only possible universal proposition for thinking about ethics.

The three women find themselves stranded in the German village of Altendorf. In the first part of the novel, l’ Abbé de la Tour describes the moral dilemmas Emilie, Constance and Josephine are now facing, in Altendorf⁶⁶: “Les deux jeunes personnes se

⁶⁶If Emilie recalls Emile, the moral fictional subject of Rousseau’s *Emile* brought up outside society by his tutor, Josephine recalls Joseph the enlightened emperor who died during the earlier period of the French Revolution and

trouvèrent bientôt établies dans la plus jolie maison du plus joli village de la Westphalie" (IX. 44). The very first sentence of the story recalls the philosophical tale of Voltaire: Candide by its geographical location (Westphalie) and its ironic description (the double presence of the adjective quaint or cute: ". . . établies dans la plus jolie maison du plus joli village de la Westphalie." Emilie and Joséphine like Candide before them live near a well to do German Baron and his family : The D'Altendorf. Though less ridiculous than the Baron von Thunder-ten-Tronck, The Baron d'Altendorf is solemn and pompous. The parallel between the characters continues at the level of the plot. If Candide fell in love with Cunégonde the daughter of the Baron; Emilie is going to fall in love with the Théobald the son of the inhabitants of the castle. However, these similarities are similarities of details.⁸⁷ What probably interested Charrière in Candide was the moral dilemma the tale offered. In Candide, the characters are placed in situations that require them to take into consideration the logic of causes and events in their stories and thus the "will" of the characters is submitted to the law of a "creative" causality according to which everything is the effect of something else and every cause is connected with a preceding cause. If morality is presented in the novel, it is to be submitted to the logic of causes and effects, which, insists Charrière, is indispensable in a good novel: "un roman bien fait [doit contenir] La pressante logique

Constance, could recall Benjamin Constant. The referentiality of the names proposes a mixture of fiction and history.

⁸⁷ Alex Deguise, Le monde de Madame de Charrière (Genève: Slatkine, 1988) pp.198-205. Deguise notes similar details between Candide and Trois Femmes.

d'un enchaînement nécessaire de causes et d'effets" (IX, 34). Charrière reminds the reader that with a novel there are conditions that are imposed. But these conditions can be seen as the setting for the imperative to shine forth, a setting that includes space and time and the logic of the story. However, in Candide, only the logic of causes and effects functions to think morality. Moral actions recede in the background for a presentation of the hardship which life put Candide through. Candide faces a life of misfortune and calamity. But Candide never reflects on the morality of his action in life. He tries to find a practical way to endure the difficulties of life and finally ends up in skepticism, since neither Providence nor human reason can order all things for man's convenience. Candide is concerned with living a life without too much damage for himself and in the conclusion, Candide advises the reader : "to cultivate one's garden." This precept combines two recommendations: to remain aloof from the world so as to avoid suffering, and to labor in order not to think. However, even though Candide is disappointed with the world, and reject any moral or religious doctrine that tries to make sense of the world, he ends up thinking that individual preoccupation with one's work will improve and make a better place for the world. Never is Candide once concerned with the morality of his own actions, so one can wonder why Charrière turned to Voltaire in order to address Kant's concept of duty? In terms of moral philosophy, Voltaire seems to be at the opposite side of Kant's ethics. A moral action, for Kant, originates in the will of a rational being operating on the basis of universalizable maxim. Philosophy's task is to point out that freedom is a reality of immanent reason. Philosophy's task is also to mark out a region that fatalistic and materialistic speculation

cannot invade in order to destroy the foundations of morality. Nothing could be further away than Candide's profession of faith at which he arrived to after all the tribulations that befell him. Candide is no Kantian moral subject. He functions as a naive and good-hearted person subject to immoral and evil actions. Immorality comes from the institutions whatever form they take: hereditary privilege, war, the aristocracy, the church, the Jesuits, slavery, savage self-interest and evil comes from nature : earthquakes, fire, etc... . Candide stands between Dr. Pangloss, an optimistic figure who denies evil and assures him that everything is for the best in this world, and Martin who tells him that evil is real and inherent in the world. Both of these attitudes have in common avoidance of judgment and dogmatic substitution. Both justify the existing situation and incline Candide to sink into apathy by denying the prospect of improvement. The tale ends with only a partial resolution of the ethical dilemma since Candide realizes that action results in anguish and abstention from action in ennui. What he advocates as ethics is a bare self-sufficiency.

By recalling Voltaire, Charrière exposes the dilemma the writer is faces: Is it possible to describe moral actions "at work," to present ethics not based on the actions of her characters or the logic of causes and effects and consequence of the story? Is it possible to offer examples of duty without offering a model of what duty is, or of what the moral law consists of? To give a substance of the concept of duty or of the moral law would be to give an empirical definition of moral law and duty which is in contradiction with Kant's exigence of a pure presentation of duty. The question comes back to question of presentation (*Darstellung*). Thus, Charrière's intertextual appeal to

Voltaire makes sense since as a writer he tried to give life to questions of ethics. Charrière is concerned with both Voltaire's ideological aspects and his craftsmanship since she insists: "Voltaire, en dépit de tout son esprit et de toute sa verve est cependant monotone: c'est qu'il n'avait pas de manière"(V, 190). From Charrière's point of view, both the description of a moral experience and moral concepts in Voltaire's tale is a failure, since Voltaire did not find an effective expression for his agenda in Candide. Charrière's comment also shows her constant preoccupation with the creative process in fictions. Charrière is in search of a mode of expression (une manière) that would not only exemplify the concept of duty but also would distract and entice the reader.

In Trois Femmes, Emilie and Joséphine will not travel everywhere like Candide and Cunégonde. They will explore the questions of morals at home and within themselves. The consequence of Charrière's interests which brings her to develop the nature of her characters, and the complexities of their experiences and decisions has a literary denouement in which the prose of the modern novel is taking shape.

Emilie, the aristocratic French daughter lost both parents during the French Revolution. With the death of her parents, the exigency of the paternal law disappears since there is no authority left to enforce the law and to subject her to rules of conduct and maxims of morals. In Germany Emilie is living with a young servant Joséphine. Emilie's parents had been Josephine's masters and provided for her food and lodging. Now in Germany, the servant becomes the sole provider for the household, consisting of Emilie alone. Joséphine's position as servant reverses itself since now she is the one

who brings food and regulates the life of her mistress. Moreover, since Emilie is under the shock of the death of her parents, it is left to Joséphine to make all the decisions concerning their present life. Emilie is without money, and has recourse to Joséphine to pay for the renting of their house. This dire situation soon cleared when suddenly appeared Constance who will become the rich benefactor of the two women. Constance is a rich widow, without attachment to any country. Her fortune comes from the money her husband and father amassed in the colonies. After the death of her husband, Constance wanders in Europe looking for a place to stay : “Depuis un an, je parcours la Pologne et l’Allemagne, cherchant un endroit où je puisse vivre ignorée et néanmoins sans ennui. J’ai trouvé plus que je ne cherchais; je reste. Je suis heureuse” (IX, 64). Constance will choose to stay with Josephine and Emilie.

If women’s identities are determined by the law, contingent on their function as wives, mothers, and daughters, the lives of these three women offer a new perspective on an identity conceived in terms of this law. Emilie has lost her parents and is not yet married, nor under the care of any male authority. Not only has Joséphine no master but she is now in charge of Emilie. Constance has no husband and no father. To the marginality of their social and familial status is added a geographical and political marginality, since the three women are foreigners living in a foreign country.

Already at the level of her examples (these women are French but live in Germany) Charrière takes a distance from a deterministic vision which would have women dependent on men and their social position. I would argue that Charrière’s women offer a possibility to envision the moral law “at work” since the precedents for

such situations of freedom or examples “free women.” are rare, in fiction as well as in reality. I would argue that the present fictional situation of the three women, which introduces a rather new legal, social and moral context, is there to approve of Kant’s directives as to the moral law: The categorical imperative or concept of duty is not dependent on any empirical situation, but on a self-legislating law which orders them to act in such a way that the maxim on which the moral agent would act could become universal. The women of Trois Femmes are partly freed from given and well-known moral, legal and social context, since the world of aristocratic conduct is dead and they have the means to sustain themselves, and therefore do not have to submit to traditional codes of behavior. The authority of the norms on which these women had relied in the past is absent. The context and the maxims are put to the test since morality obviously does not depend on a context and a set of maxims. Since, both context and set of maxims can change radically for one reason or another. In this case the change is due to the French Revolution. Morality must be found outside of any empirical context or preset rules of conduct. Charrière puts her women in a situation of reflective scrutiny which follows the Kantian procedure. Charrière is not interested in explaining a genealogy of morals but strives to show how the normative claims of morality are relevant to practical actions. The women find themselves in a situation which will oblige them to locate the source of moral decisions within themselves. Not constrained by external norms, but exposed to life of the German people in the village, the women use the distance that they have as foreigners to reflect on the rules rather than act directly on them. This element of foreignness causes a vacuum for traditional moral

judgment since it presents a withdrawal of traditional normative structure. Yet, the question persists, what does a concept of duty consist of and what makes an agent of the moral law moral? And it is through such reflections on moral actions, that Charrière's three women try to make sense of their lives.

The abbé begins to tell the narrative of Trois Femmes with the story of Emilie, which in its background setting resemble the story of *Candide*. Both are orphans, both went to Germany and both are accompanied by one person. This analogy to *Candide* warns the reader that Emilie is going to be prone to a passive attitude, the least apt to use her reason when catastrophes befall her. Emilie's parents died as they arrived in Germany, leaving her with no financial means but with clear understanding of what the comportment of a young aristocratic woman should be. As if the analogy with *Candide* was not sufficient, the scene between Emilie and her mother on her deathbed recalls a famous scene of moral transmission, the scene in La Princesse de Clèves, in which the dying mother passes on to her daughter the rules of conduct at court. But, the rewriting of the scene employs irony, creating in the text of Charrière an effect of distance from the tragic description in the Princesse de Clèves. Moreover, Emilie underlines that the moral injunctions of her mother are the rules of conduct that she had learned. But rules of moral conduct are not yet rules of morality:

Je te laisse à la Providence, m'a dit ma mère: prie Dieu, mon enfant; réfléchis, conserve tes bonnes habitudes; Je n'ai point d'autre mentor à te donner que toi-même. (IX, 48) . . . Je suis jeune, Josephine; en perdant mes parents, j'ai vu qu'il ne me restait d'autre patrimoine que l'éducation qu'ils m'avaient donnée; elle était stricte et ne m'avait pas permis de croire qu'on pût dévier en rien du devoir. être sage, être vraie, ne posséder que ce qui est bien à soi, voilà ce qu'on m'a recommandé depuis que je suis au monde. Est-il bien étonnant que j'aie quelque peine à prendre sur tous ces objets des idées plus relâchées ? (IX, 69)

Emilie's inheritance (*patrimoine*), she declares, is the moral injunction her mother left her which consists in keeping her virtue. These moral rules have to do with the moral and fantasmatic desire of her parents. In her case, moral education is a story of genealogies. To have a moral perspective, she explains to Joséphine, is to place herself in a genealogy of morals her parents handed down to her. To be moral is not to be submitted to a law she could give to herself but to submit herself to her mother's injunctions regarding virtuous conduct. Because of the respect she held for her parents, Emilie is reticent to get out of the moral code she inherited. The duty that morally binds her is a duty which stands under the decree of her family. It is far from a Kantian conception of duty which commands exactly the opposite, that is, in the constraint put over one's motives by one's acknowledgment of the moral law. "Être sage, Être vrai" is for Emilie a story that links the fictional and traditional perspective on a woman's virtuous conduct with a context provided by the actual death of her parents as well as the metaphorical death of the French world of Ancien Régime. In the new context of poverty and displacement, Emilie's claim to her genealogy sounds rather out of place. She does not see the paradox in her claim to cling to moral principles which superimpose Ancien Régime France onto her new German quarters. The moral injunctions of "être sage," and "être vrai" that Emilie received, have to find new meanings in her present situation in Germany.

But as if it was not enough for Emilie, the narrator describes Emilie's situation in a very cynical tone. The parents lost their fortune because they refused to foresee

what would happen during the French Revolution. As a result of their stubbornness their castle in the provinces, their “hotel” in Paris and their wealth were confiscated. Once they emigrated, despondent about their fate, they died in a few days from each other without any provision made for their daughter:

Son père et sa mère espéraient, ainsi que tant d'autres, une contrerévolution prochaine, uniquement parcequ'ils la désiraient, et cet espoir les avait empêchés de vendre, lorsqu'il en était encore temps, un château en province et un hôtel à Paris. Sans prévoyance d'abord, bientôt sans argent, le chagrin triompha de leur raison, altéra leur santé, et les conduisit au tombeau en même temps ... C'est ma femme, c'est ma fille dont l'infortune me donne la mort, disait un père affaibli. Je ne puis survivre à mon époux, ni supporter la misère de mon enfant disait sa mère mourante. (IX, 43)

Both parents invoke the fate of their daughters as so unbearable that they cannot survive it. If Emilie should follow the example of her parents, the same logic of reasoning on her fate should lead her to death since death appears to be the only outcome for such drastic political change. This Voltarian and ironic introduction to the imperative of love and morality in the family may be comically presented but makes Charrière's main point on morality⁸⁸: the emphasis like her contemporaries Rousseau and Kant on “autonomy.” Emilie's parents are unable to be “free” from their beliefs in the norms attached to worldviews of the Ancien Régime. They lost everything as they clung to a rigid conception of a moral world with definite norms of conduct and cannot face the new

⁸⁸ In one of her letters in the correspondence, Charrière insists that comical aspects are necessary one to lead to moral questions: “La scène me parait aussi morale que comique et son comique m'est nécessaire pour marquer le caractère de la pièce et ne la mettre pas dans la classe des pièces uniquement nobles et du seul comique larmoyant” (IV: 66).

emerging social and political system. Thus, they take refuge in the fiction of a counterrevolution (“contrerévolution prochaine, uniquement parcequ’ils la désiraient”) instead of rethinking their world views. In Charrière’s fiction, politics emerges as the framework for the articulation of an understanding of morality. Politics is not presented here as a simple denunciation of an old order of society that has to yield its place for a new order in society; it does not offer new norms of conduct for social beings. To think about morality cannot be restricted to an analysis of the norms alone. And the presence of the French Revolution (the historical context) allows her to see the possibility of a reflection on morality as erupting from the dissolution of former moral images. The Revolution approximates more nearly the conditions of reality than the moral views of Emilie’s parents, since they were narrowly defined and entirely overlooked the contexts upon which the acceptance of the norms depends.

The revolution in Charrière’s fiction accords priority to the accidental over the necessary, to the transitory over the permanent, and opens up a space for a self-determined life. Discourses of morality will have to be rooted in the self-image of an agent, in its implicit knowledge of itself and of the world. Thus, morality cannot be invoked because the traditions of morals requires it to be so or because of the presentation of a new historical situation. If one advocates moral behavior it must be because of its universal validity, but universality seems to be located in the reflection on each singular action performed by the characters. Thus, morality consists in the critical examination of each particular action which the person wants to describe as moral. The “pure” moral concept of duty cannot be identified with one’s particular idea

of duty.

Josephine's situation is the inverse of Emilie's. As a servant in the former French household, Joséphine occupied a space that cannot be even thought as moral in Kant's sense. As a servant her main prerogative was to obey. She is thus unable to exercise what Kant calls "free" judgment. Instead she was the object or instrument of someone else's desire. In this case, her presence is fundamental for thinking the inherent structural problem of the categorical imperative, namely the "ought" (in Charrière's terms "le devoir"). As Charrière explains, the presence of servants as fundamental figures are important to reflect on moral issues:

Partout dans tout ce que je ferai je mettrai en scène des gens de la classe appelée basse pour leur faire jouer un rôle honnête, noble même à un certain point. C'est ma démocratie à moi. . . . J'attaquerai toujours les préventions avantageuses et désavantageuses qu'on établit pour ou contre des classes quelconques, et l'on sera auprès de moi prince impunément ainsi que laquais. (IV, 466)

Again Charrière innovates in terms of literary representations since now servants are endowed with the possibility of representing the "noble" character. Because servants cannot be pre-determined in representations as strictly as members of a "noble" class, there is a possibility for Charrière to represent the actions of the servants as "noble" actions but without the literary connotations associated to the term "noble."

During their stay in Altendorf, Emilie learns that Josephine has been sleeping with Henri, the servant of the near, well-to-do German aristocratic family. Joséphine slept with Henri because she desired it but also in order to provide some relief to their financial troubles. In learning about the affair, Emilie reacts in accordance with her upbringing as the "moral" daughter of a proper scenario of manners. She is outraged.

But alienated as she is from her "patrimoine," her indignation mimics a series of tragicomic sentimental matrix:

O Dieu! que me fais-tu envisager! s'écria douloureusement Emilie. Quoi! tu payes de ton honneur, de la vertu, les jouissances que tu me procures ! Ah ! ne me donne que du pain à manger, et de l'eau à boire. Vends mon linge et mes habits, et qu' Henri cesse d'avoir des droits sur la reconnaissance dont il abuse. (IX. 45)

Emilie bombards Joséphine with all sorts of reproaches regarding Joséphine's immoral situation. But Joséphine is unshakable. Joséphine argues with Emilie that if virtue consisted in her not sleeping with Henri, why when Emilie heard noises during the night in the adjacent room, did she not intervene? If Emilie claims the position of a moral judge, then, argues Joséphine, she should have intervened and chased Henri away from Joséphine's bed. Joséphine insists that it was Emilie's duty to act in such a way because of her position as a master:

Si tout cela vous paraît si grave, reprit Joséphine, oserais-je vous demander pourquoi vous ne m'avez pas défendu de recevoir Henri, et ne vous êtes pas opposée à tous les petits services qu'ils nous rendait? ... Si Joséphine vous eût été si chère que vous l'êtes à Joséphine, vous auriez pris soin de ce que vous appelez son honneur, comme elle en prenait de tout ce qui vous concerne. (IX, 46)

Emilie claims that she did not act, precisely out of respect for Joséphine but mainly as it turns out of a sense of decency for herself. Joséphine notes the ethical difference between her and Emilie. If Emilie is preoccupied with Joséphine's virtuous conduct, Joséphine is concerned with Emilie's well-being. Whatever Emilie invoked in the name of morals turns out to be done not out of the formal command of virtuous conduct and not out of their life in Germany.

Josephine denounces the excessive tact of Emilie as immoral since, to protect her own moral interests, Emilie did not do anything. As in Kant, experience seems to be unable to provide any examples of moral actions. Joséphine harshly denounces Emilie's moral attitude which she says is based on morals in novels. Moreover, insists Joséphine if Emilie reacts on the basis of morality exposed in fictions, then she should have been able to foresee Joséphine's "fall," since the heroines always make "faux pas" and fall into the arms of their seducer, and she should have prevented Joséphine's fall.

Joséphine now denounces novels as unable to provide examples of moral conduct:

... A quoi sont bonnes toutes vos lectures, si elles ne vous apprennent pas à prévoir les choses mieux que nous, qui n'y pensons que quand elles sont faites. J'oserais presque dire qu'une belle éducation est bien mauvaise, si elle ferme les yeux sur ce qui se passe tous les jours dans le monde. Mais ce ne devrait pas être cela. J'ai quelque fois ouvert vos livres; j'y ai vu des rois, des bergers, des bergères, des colonels, des marquis, des princesses. Cela revient toujours au même: les hommes s'introduisent auprès des femmes, et par-ci par-là se battent pour elles, tandis qu'elles se haïssent pour eux : en prose en vers, il n'est question que de celà. (IX, 46)

In Joséphine's criticism, Emilie's moral reactions are directed to a world of fiction.

And if Emilie's moral attitude is to imitate actions in fictions, then Emilie cannot act for the well-being of Joséphine. Joséphine functions also as a reality check when she tells her mistress what it meant to be a servant in Emilie's family. Joséphine describes Emilie the aristocratic moral values that some family members of Emilie's world possessed. They understood Joséphine's duty as one of total obedience: and to obey meant that Joséphine had to submit herself to their right to enjoy her. Joséphine makes it clear to Emilie that virtuous conduct meant nothing for her since Joséphine's main duty was to procure pleasure for her

masters. Because of her position and status, Joséphine's actions can not be accounted as immoral since her main imperative was to obey whatever orders were given to her. Her duty, unlike Emilie's, did not consist in virtue but in an obedient conduct. As a servant, Joséphine had to obey the law posited for her by her masters. In Germany, the situation can be reversed since Joséphine may become a self-regulating subject. This reversal indicates that her former position did not preclude a possibility for self-legislating abilities in a different context.

When she was an object of enjoyment for the aristocratic libertines, Joséphine never asked herself what she wanted. Her obedience to the law of the libertines negated personal responsibility. Hence, it would have been impossible for Joséphine to put in action the categorical imperative since the principle of moral action came from an external source, the law of her masters and not from Joséphine herself:

-Quoi. Joséphine, Henri n'est donc pas le premier . . .? -Eh non, Mademoiselle!- Qui est-ce qui a séduit ta jeunesse . . . C'est Monsieur votre oncle le grand Vicaire.-Est-il possible Joséphine?- Rien n'est plus vrai, Mademoiselle; à telles enseignes que voilà une croix qu'il m'a donné; voilà aussi une bague; et vous connaissez mes heures avec leurs crochets d'argent, il me les a données aussi . . . [le] frère de madame votre mère, Mr le Marquis de ***.- Ah, mon dieu Joséphine -Pour celui là, il ne m'a rien donné qu'un vieux dé d'or, qu'il avait peut-être pris à la Marquise. (IX, 47)

Questions of subjectivity and morality are entangled in Charrière's description of Joséphine's past and present life. Even though she cannot be a subject in the social or moral sense in the case of her life in France, she still enjoyed the gifts she received from her former lovers. In Germany, the situation is turned upside down. Her sleeping with Henri is a gesture we might say of reparation instead of retribution. Indeed, she

reconstructs her philandering with Henri as the act of a subject since she can reason about her action: "Oh! Mademoiselle, dit Josephine, c'est aussi prendre un peu à la lettre ce que je dis. Il se pourrait que j'eusse déjà fait quelque chose pour Henri avant qu'il ait rien fait pour moi, et je ne sais pas bien exactement lequel de nous deux a eu le premier droit à la reconnaissance de l'autre" (IX. 47).

Josephine becomes a burlesqued sentimental "don Juan," a travestied heroine of sensibility. Her feelings are becoming increasingly entangled in duplicity—since her affair with Henry is doubled by her flirtation with Lacroix, the French servant of Constance. The moral scenario of virtuous conduct is destabilized as Josephine becomes entangled in a web of duplicitous moves on which the male servants recirculate. In Josephine's case, recirculation amounts to a serial addition as it was the case for Don Juan. Josephine makes it clear that her sexual encounter is not only a question of sacrifice or abuse but also primarily of pleasure. Sex loses its negative connotations, and the binary opposition between body and spirit and its philosophical attachment, animality and idealism that the term sexuality evokes, slowly erodes. The very physicality of Joséphine renders her incapable of separating morality as idea from the realm of the physical. Charrière's tropes link body and spirit and thus subject the body to the dictates of morality and morality to the cycles of the body. The web of relationship binding together apparently opposite qualities corrects the conceptual and moral violence of Emilie's oversimplified distinctions between prudish attitudes and deprived sexual conduct. In the context of Joséphine's actions, sexual decency is devoid of shame as her actions are individually negotiated without coercion. Joséphine's

accumulation of men produces a supplemental result for the household, goods and money. It is precisely Josephine's sexual encounters that give value and meaning to Joséphine's moral attitude since these encounters also show the care that Joséphine showers on Emilie.

In contrast to Emilie who lives the moral maxims of her past and her fictional readings, Josephine lives her maxims in relation to their joint future. Her Don Juanism has now acquired a pragmatic aspect. Emilie's concept of duty which consists in replicating the virtuous behavior of novels is defeated by this episode. Virtuous behavior may be a social norm of conduct but it can not qualify as a moral action for Joséphine.

Joséphine refuses to repent when Emilie asks her to. What is scandalous about Joséphine's attitude is her unrepentance and Emilie's inability to enforce a code of morals. From this perspective, Joséphine can articulate a desire and distort the language of morality. All of her actions have a purpose, which although they include her own desire, are directed towards their future well-being. By pointing to the failure of Emilie's morals, Joséphine points to Emilie's symbolic powerlessness. Indeed, Emilie is left without any signifier of her own that could represent her in the social order. Emilie only repeats a moral inherited social code but the social context of its enforcement is missing. Morality reveals itself as a repetitive action predicated on the loss of subjectivity. To make her point clear, Joséphine mimicks Emilie's moral automatism when she calls herself a moral person because she goes to church to hear the priest's sermon. The only problem is that the priest speaks in German, a language

Joséphine does not understand:

Vite, je cours à l'église: c'est aujourd'hui la fête de Saint- Sigismond, patron du village; après la messe je resterai au sermon. Mais tu n'entends presque pas l'allemand. dit Emilie. N'importe, répondit Joséphine; toujours est-il à propos de rester au sermon. et j'ai mille fois entendu dire que les maux de France ont commencé quand on ne s'y est plus soucié de sermons ni de messes, de fêtes, ni de Dimanches. (IX. 46)

In the above sentence, Joséphine not only parodies Emilie's action, she also indicates that an idea of morals is more important than the form it takes. It does not matter that Joséphine understands what morals is about as long as she insists there should be a sense of morals. Emilie is left unsatisfied with the answer and when Joséphine comes back home from the church, she tries to repeat to Joséphine what a moral code consists of. Joséphine, bored at Emilie rebuffs her:

J'ai pensé bien sérieusement à toi et à la scène de cette nuit. Quoi cela n'est pas encore oublié? Dit Joséphine, en se mettant en devoir de coiffer sa maitresse.- Non Joséphine cela n'est pas oublié; et comme je ne veux plus mériter le reproche trop juste, que tu m'as fait, je t'exhorte à considérer ...- Tenez-vous un peu plus droite, Mademoiselle ou je risque de vous coiffer tout de travers.- Joséphine pour ne pas t'ennuyer d'un long sermon, je te dirai seulement ... - Vraiment, Mademoiselle, vous faites bien de m'épargner un long sermon. C'est assez d'un dans la matinée , et l'ennui que je sors d'avoir, me doit mériter le ciel. N'entendre presque pas un mot, se tenir comme une souche et n'oser pas dormir parcequ'on est regardé de tout le monde (IX, 47)

These may be Charrière's most scandalous remarks on social norms regarding virtuous conduct since the voice of Emilie, both the voice of the master as well as the voice of normative morality are always interrupted and foreclosed by the impertinent remarks of the servant. This complete reversal of situation would be all and well if the two of them were leaving alone without any other contingencies on their hands. But it is

not the case.

Although Joséphine may have obtained whatever was necessary for the house from her German lover and added to it food luxuries supplemented by the French valet Lacroix “des prâlines et des pâtés.” all is not that simple since Joséphine confronts a social world in Germany that is also constituted of moral maxims. Henri, having discovered Joséphine’s other love interest, reacts to her actions and demands that she stops her supplemental activities: “Joséphine, laissez-là votre français ; je ne m’accomode pas de ses manières avec vous. S’ il fait des pralines et des pâtés, qu’il les fasse sans vous; et vous faites le reste de l’ouvrage sans lui” (IX, 69). Henri may be a servant but as a man and Joséphine’s lover, by voicing a moral request, he announces that he has rights to legislate over her. The story is further complicated when Joséphine, pregnant, insists that the child is Henri’s and that he should marry her. But Henri refuses to do so on the assumption that the child may not be his. Joséphine foresees a grim future for her and her child.

Up to now the characters all reacted to the events that were presented to them in terms that best satisfied their desires. All the imperatives they submitted themselves to were hypothetical since they acted in regard to their specific goal (satisfaction of their desires). This hypothetical behavior was dictated for Emilie by her respect for her parents’ wishes and for Joséphine, the discovery of her desires. Their actions did not come from a law they conceived for themselves. But this course of action changes when confronted with Joséphine’s pregnancy, Emilie has to make a decision. She decides to affirm that her love for Joséphine is more important than her respect for virtuous

conduct. Emilie will act in accordance to the well-being of Joséphine at the expense of her norms of conduct. But at first Emilie is torn between what she sees as her obligation to the moral truth (Joséphine had several lovers and it is thus not clear who the father of her child is) and her desire for Joséphine's well-being:

Mais, ma chère Joséphine, trahirai-je la vérité, moi qui n'ai jamais affirmé que ce dont j'étais ou me croyais assurée? Abandonnerais-je en un instant des principes et des habitudes sur lesquelles je fonde tout ce que je puis avoir d'estime pour moi-même? ... C'est fort bien, Mademoiselle, abandonnez et trahissez Joséphine plutôt que des mots, de grands mots, la vérité, vos principes, vos habitudes, et quand je serai morte, estimez-vous encore si vous le pouvez Je cède Joséphine; mes répugnances cèdent les unes après les autres à l'amitié, à la reconnaissance. Cette condescendance m'ôtera peut-être toute l'estime que j'avais pour moi: n'importe; il ne doit pas être question de moi quand il s'agit d'empêcher le malheur des autres, et de vous surtout Joséphine, qui êtes la personne du monde à qui je dois le plus. (IX, 68-9)

It is not easy for Emilie to choose to defend and respect Joséphine's interest since it is in direct opposition to what she always saw as her moral duty, a respect for truth. But the imperative of friendship supervenes the previous maxims. The categorical imperative that Emilie is applying to her new maxim could be formulated as such:

Respect and help your friend in the same disinterested way that you could wish it for yourself and everyone. According to the universalized "law," Emilie helps Joséphine. And to help Joséphine means to force Henri to marry Joséphine. In order to follow her imperative of friendship, Emilie has recourse to minor blackmail. Henri knows that his master Théobald is in love with Emilie and that he plans to marry her. Emilie threatens Henri with immediate departure if Henri does not marry Joséphine, knowing that Henri will yield since he has the affairs of his master at heart and does not want to take the blame for Emilie and Joséphine leaving the village. Emilie succeeds in forcing Henri

to marry Joséphine. However, Emilie cannot so easily abandon principles of virtues that she lived by all her life and which also are part of her moral persona. As a result she asks Joséphine to promise her that she will stay faithful now that she is going to be married. Joséphine acquiesces.

However, by respecting the law of marriage and the promise made to Emilie, Joséphine loses the free space of reflection necessary for pure moral judgment. Now that Joséphine has acquired the status of a wife and that of a future mother, it is in the name of these new identities that Joséphine is going to act. At first uncertain of his paternity, Henri mistreats Joséphine. Joséphine, who was previously so resourceful, completely changes since she tries to construct the image of a perfect wife as imposed on her by Emilie. For that, she repeats the actions of a “perfect” wife, accepts Henri’s abuses and becomes a self-sacrificing wife and mother, not only to her own child but to the child of a Countess émigrée who abandons her own child born on the same day as Joséphine’s child. Joséphine becomes a symbol of motherhood and lost the previous sense of morals that she had as a servant. When Emilie and Joséphine were living alone far from France, Joséphine could be seen as having gained the position of a subject in the household; Joséphine was ruling the house and the morals of the house according to her own moral law based on maxim of friendship: love your friend not for yourself but for her good.

After her marriage, Joséphine’s imperative is transformed into an ideal: Be a good wife and good mother:

Joséphine, répondez-moi comme vous répondriez à Dieu: Si Henri vous épouse, lui serez-vous fidèle? Je le jure, dit Joséphine: j’ai refusé dans un autre temps de vous faire une promesse que je savais ne pouvoir pas tenir; celle-ci je la fais, parceque je veux la tenir, je la tiendrai. (IX, 68)

By swearing allegiance to the social and conventional moral code, Joséphine thereby abandons the freedom that allowed her to rule her life and loses her status of self-legislating subject. Joséphine is not consistent with the Kantian vision of morals, she submits herself to the prescriptive concepts of both motherhood and wifely virtues which oblige her to follow a normative conduct pre-established by maxims of virtue. Joséphine will persist in following her wifely and motherly imperative to please her husband. But she cannot please him and the freedom as an ethical subject that she had exercised previously is lost. To be a wife and a mother, in Joséphine's case is understood as a mechanical model, as the performance of the phantasmatic expectations of others, a situation she was living in France when she was subjected to the desires of her masters. Thus, Joséphine returns into her previous condition, that of a servant but now it is to be a servant not of desire but of an ideal. In the story of both Emilie and Joséphine, Charrière played out a chiasmatic evolution towards the realm of morals for both Emilie and Joséphine. Joséphine who previously was a self-legislating moral subject becomes a moral subject in the traditional Christian sense since her moral worth after her marriage consists in obeying her duty which is presented to her as rules of virtue. Joséphine has lost her status as a free moral individual and fall onto the trap of perceiving morals in conformity to a code of conduct. Although firmly believing in a traditional moral code, Emilie is able to think reflectively and take action as a free moral subject when she chooses to act in behalf of Joséphine. In both cases, at a moment of their lives, they commit moral actions in the Kantian sense, that is, according to the

criteria of the categorical imperative. The importance of such examples underlines first of all that morality is to be found in the action that one imposes on oneself and not in one's moral "nature." And second, if ethical actions derive from a code of conduct, there will always be possibility of falling back into mechanical behavior. The effort to identify a moral order with the order of the highest virtue in the case of Emily or to identify it with the realm of motherhood and self-sacrifice for Joséphine has failed them as autonomous moral beings. But that does not mean that the notion of a moral order should be dispensed with or that it is devoid of content. It consists in the submission of the actions to the "pure" moral law. It will be left to Constance in the story of Trois femmes to clarify the distinction between moral conduct which implies an heteronomous understanding of morals and the categorical imperative which presents an autonomous individual.

Constance's name may already be an indication of her moral status and her position in the story. It could refer to the principles of constancy and consistency, that regulate the test of the categorical imperative. If in the case of Emilie and Josephine, their actions posited in terms of the imperative only intermittently, in the case of Constance, the idea of duty constantly corresponds to the logic of the imperative. Constance, the third example brings Kant's concept of moral action into a perspective which is truly compelling as she illustrates the discontinuity of the ethical act. With Constance, the focus is not on the moral person who regulates moral actions but on the constitution of ethical actions. The focus on the ethical act is underlined right at the beginning, when l'abbé de la Tour describes Constance as one of the most intelligent

and resolute woman he ever met: "jamais je n'avais vu de femme plus entendue, ni plus expéditive" (IX. 61). L'abbé de la Tour's description emphasizes both Constance's understanding (entendue) and her actions (expéditive). Constance appears in the lives of Emilie and Joséphine without proposing a personal narrative, reserving the account of her life to the end of the novel. Thus, the Abbé de la Tour's narration reveals very little information about Constance's life. Charrière points here to the general failure of novelistic poetics to exemplify moral actions, since in novels moral actions have to be thought as resulting from the motives that the "I" articulates. It is therefore always difficult to disentangle psychological motives from moral motives. By not representing the historical past of Constance (and therefore making sense of Constance's moral choices as a result of Constance's psychological profile and story), Charrière avoids the main contingency in narrating one's own duty, the causal explanation that derives from the historical and psychological representation of the character. Thus, Charrière concentrates on representing Constance's actions and Constance's reflexive attitude as to what makes her actions, moral actions.

The sequel to Trois Femmes which is the story of Constance, contains in the introduction judgments that Emilie, Constance and l'abbé de la Tour pronounce on the representation of morals in literary novels:

Elles lisaient. Ce n'était pas des Romans ; quelqu' éloge qu'on en puisse faire, ils gâtent l'esprit et surtout celui des femmes. On y trouve une morale qu'on appellera sublime si l'on veut mais que j'appellerai plutôt idéale ou qui même n'est plus de la morale ne pouvant s'appliquer à rien. Quelque fois l'on s'engoue tellement de sa chimérique excellence que ne trouvant pas à l'appliquer et n'en pouvant goûter une plus commune et plus adaptée à la vérité de la vie, on vit sans morale du tout ou bien on tache d'arranger sa vie à la ressemblance d'un roman ou bien encore on s'imagine qu'elle ressemble à un roman dont on croit

être le héros ou l'héroïne et alors on fait des aveux comme la Princesse de Clèves. on se tue comme Werther. mais cela n'arrive qu'à quelques dupes . . .
(IX. 136)

To this condemning look at novels in terms of teaching morals, follows a list of novels upon which Emilie and Constance pass judgments. However, the literary conversation about the moral merits or demerits of novels is interrupted by Constance who recounts her life. Warned by Charrière that nothing moral can be deduced from Constance's own story since it is a novel, to understand what a moral action consists of, the reader has to read the first part of Trois Femmes only. Constance confides her story in a public meeting which is attended by Emilie, the Abbé de la Tour and a parent of Emilie who appeared in Germany after Emilie's wedding and who seems to know Constance from a previous time. The story has its particular title : Histoire de Constance.

Thus, Charrière will have the reader wait to the end of her story to discover anything about Constance. This marks a clear separation between the presentation of Constance as the character of the story and the actions of Constance as the subject of a story. In the first part of Trois Femmes it is impossible to speak of Constance herself in meaningful ways since nothing is known about her. The narrative sequence that Charrière imposes and which introduces Constance's actions before the presentation of Constance's life exemplifies an obligation to judge moral actions and in advance of the history of the decision of a moral subject to act. This also implies that morality cannot be identified once and for all with the subject or rooted in a foundational exemplary action, rather morality is always marked by a particular point of view from which the all

of the moral maxim is disclosed. There cannot be any neutral notion of morality since morality is rooted in the reality of a particular action in its specific contexts.

When Constance appears in the lives of Emilie and Joséphine. Emilie describes Constance as a virtuous woman to Joséphine simply because Constance makes a “proper” use of language. But if Emilie thinks highly of Constance, it is because she wants Constance, their main benefactor to stay with them. Joséphine is no dupe and she makes Emilie aware that Emilie’s enthusiasm for Constance’s moral nature is based on her particular desire to keep Constance in Germany. Constance does not explain who she is nor why she is in Germany. When Constance speaks, it is simply to state that she is rich and that the money she inherited may have been obtained by unscrupulous means. Reacting to the word “unscrupulous,” Emilie immediately asks Constance why she does not try to find out whom she could return the money to, since the money had been wrongly obtained. Emilie’s demand shows that her understanding of morals is based on the abstract notion to be “just.” Emilie merely desires Constance to do “good,” to return something that does not belong to her. Emilie conveniently forgot that in a previous situation, she had been the one who found a harp in her garden placed there by the neighbor Théobald. She did not try to return the harp acquired through the manipulations of Joséphine who slept with Henri. Instead, she kept it. Constance responds to Emilie in showing her that her decision to return the money may be the moral action to do in theory but in practice to return the money to who were the previous owner is an impossible action which should be discarded since she cannot locate the previous possessor:

Comment le restituer? dit Constance. Si l'on a trop gagné avec les particuliers, les lésés sont éparpillés sur toute la surface du globe. Si l'on a volé le Public. pourquoi restituerais-je? Je suppose que ce fût la France. sous l'ancien ou le nouveau régime. qu'on eût volé. devais-je l'année dernière donner mon bien à Robespierre. ou cette année à ceux qui ont détruit et qui se disputent son pouvoir? Je suppose que ce fût l'Angleterre. payerais-je mon écot pour soutenir une guerre qui, dirigée contre le pays que j'aime, le pays où je suis née, désole, dévaste l'Europe entière? Donnerais-je au ministère de Madrid de quoi orner la chasse et payer le voyage de quelque relique? A l'impératrice de Russie de quoi enrichir un peu plus ses favoris? Au Pape de quoi payer plus cher de mauvais soldats et de bons chanteurs? Non: selon les loix, ma fortune est bien à moi, car les actes les plus formels me l'ont donnée. Selon l'équité, elle n'est pas moins à moi: personne n'en ferait, je l'ose dire un meilleur usage. Je vis sans profusion, et cela par principe encore plus que par prudence. (IX, 64)

In Constance's reasoning, a moral action which would consist in returning the money to its owner would be problematic since she should define who the owner was, and as she demonstrates it is an impossible task. Moreover, she is attentive to the fact that if one takes into account giving back the money to the owner, one should also take into account what the owner would do with the money, thus what had seem so morally simple to think and to do : to give back the money to its owner, turns out to be an immoral task. What Constance reveals to Emilie is that once an action is seen to issue from a complex web of intentions, the possibility of coherent intention and the avoidance of inconsistent volition becomes a demanding and complex affair.

This money regulates Constance's life. And the maxim Constance lives is to be frugal. That maxim can be raised to the level of a universal principle, since Constance can will, what she proposes as a maxim to be a universal maxim. To give the money back can not be for Constance a moral action. But to be able to distribute money to whomever she wants based on her maxim of frugality, becomes a dutiful action. Duty,

remarks Constance. is not in the goal achieved (to give money), but in the maxim according to which the action is determined. In her case the money is redistributed but this is accidental to the moral action. If Emilie is to act morally she should propose for herself something possible not only for her but for others and not “desired” or “wanted.”

As Kant stated:

If we now attend to ourselves in any transgression of a duty, we find that we actually do not will that our maxim should become a universal law-because this is impossible for us-but rather that the opposite of this maxim should remain a law universally. We only take the liberty of making an exception to the law for ourselves (or just this one time) to the advantage of our inclination (Ethical Philosophy, 32)

What we have here is not a simple reduction of a universal to a particular maxim: let’s be frugal, but rather a kind of surplus of the universal. No single universal encompasses all particular content since each particular has its own universal, that is, it contains a specific perspective on the entire field of morals. The point is that the reference to universality is unavoidable since it is inherent to speech as such: the moment we speak, a kind of universal dimension is always involved. So the thing to do is not to claim or openly admit that we only speak from our particular position but to admit the irreducible plurality of the universal, so that the only true self-restraint is to admit the particularity of one’s universal to a particular moment. Constance’s reflections may be the most innovative perspective Charrière brings to Kant’s presentation of morals. Like Kant, she sets aside the question of ethical theory in terms of considerations of desires and preferences, and aims at grounding an ethical theory in the notion of consistency and rationality. However, pursuing the exemplarity of her

literary style. she presents examples of moral actions that do not affirm a moral status of a maxim of a given action, but examples which are equivocal and require interpretation. What Constance reproaches Emilie with is that her moral judgment merely reproduces an opinion which already contains moral assessment:

Ce que Constance venait de faire éprouver à Emilie, ressemblait si fort à ce que Joséphine lui avait fait éprouver, il y a environ trois mois, qu'elle se trouva dans la même souffrance, et que ses réflexions furent à peu près les mêmes. L'une avait des amants auxquels elle ne voulait pas renoncer et l'autre possédait un bien mal acquis qu'elle ne voulait pas rendre. ... Aux yeux de ni l'une, ni l'autre elle n'était parfaitement innocente, elle qui s'était crue en droit de juger, de censurer, de montrer presque du mépris. (IX, 65)

Emilie has to set aside the moral judgment she passed on both Joséphine and Constance. She is left to turn against herself her own judgment and question them. Left to reflect on her own judgment, she condemns herself “. . . elle n'était parfaitement innocente, elle qui s'était crue en droit de juger, de censurer, de montrer presque du mépris” (IX, 65).

Charrière pursues Kant's attempt to define new grounds for thinking morals in terms of consistency, universality and the particular. The moral law which could have appeared in Kant's philosophy as a simple voluntarist act, turns out to become an obligation to act in positing at the same time the particular moment and to embrace a universalist future. Thus, one is moral if one can formulate a law for oneself but will this law to be possible for everyone. Charrière's insistence on the fact that the universalizable maxim by which one regulates one's actions has to be possible, makes of Kant's principle something other than a mere formal and empty law to which the subject has to submit herself. The law makes itself known not merely if one transgresses

the law, but through its practicability.

If in the case of Joséphine and Emilie, the principle of moral action ends up to be of an external source, Constance's moral principle is determined by her. The questions raised by Constance's actions complicate Josephine and Emilie's examples since both after their marriage for different reasons consider their actions as morally accountable insofar as they do correspond to a set of moral principles. Indeed, after their wedding both Emilie and Josephine became accountable to the representative of the law : their respective husbands, therefore falling back into the novelist imperative, since in novels, female characters are presented either as transgressing the law and usually being punished for it or as espousing the law and being rewarded. The characters of Trois Femmes demystify the great institution of the moral conduct of the "heroines of sensibility." The ideology of a moral transparency disappears for a more Kantian moral perspective which consists in testing one's moral act by the maxim one proposes for oneself. Charrière preserves the aberration of competing stories when for example Joséphine appears sometimes as a moral person, sometimes as a simple heroine of novel. Charrière's writing resist the authoritative narration of "moral" evidence thereby eluding those tales that guarantee moral transparency. It is thus not surprising that her novel would present two narratives of morals: the official and literary representation of virtuous examples, that is a morality already understood as moral and the other solipsistic, unverifiable and ambiguous in its textual representation.

The categorical imperative is not just a text that Charrière defends and to which she ascribes authority. As authoritative text, the categorical imperative (duty) loses its

power and instead becomes a pretext, a source for problems, that is a source for reflections. Charrière manifests a certain enthusiasm for the idea of duty as a categorical imperative which she tries to give a reality to, with her fictional examples. But these examples are not cited as examples to be followed or imitated as is the case with a Christian traditional representation of morals. Charrière's examples simply provide guidelines to the complex idea of the imperative. As Constance makes it clear, to narrate one's own "duty" becomes increasingly difficult. Fiction becomes a creative evaluation of the principle of morality, an empirical principle. The Kantian imperative of duty, described by Kant as a directive to act, and not as a statement of fact takes its full meaning with the story of Trois Femmes.

What becomes moral actions for the characters, is their ability to learn to distinguish between desires for duty and genealogies of duty. The characters end up in a reflexive and critical position, which presents the truth of the categorical imperative as an obligation to judge rather than an obligation to obey, which is the sense often inferred from the word duty. Thus to be moral, to obey the moral law, is precisely not to renounce judgments, desire and emotions but to come to judgment after a process that implies thinking about the actions. Morality is conceived as a process which one has to learn in a reflexive manner. Charrière is closer to Kant than one would expect, since her moral philosophy can be summed up in Kant's own words: A moral philosophy worthy of that name must adopt as its point of departure the tenet that actions can only have a moral value if their motivation derives from reason alone. The ability to posit a moral judgment, therefore, becomes one's original duty, the duty before duty.

Chapter Four: La Révolution française dans l'oeuvre de Charrière

“Tout est à faire, tout est possible, ce qui était rocher, il y a six mois est devenu cire. On peut donner au royaume la forme qu'on veut.”

Lettre de Dumont à Rommily du 9 août 1789.”

Pendant la Révolution française, Isabelle de Charrière se trouve en Suisse, mais s'intéresse de près aux événements qui se déroulent en France. Ses préoccupations politiques sont longuement développées dans sa correspondance, en particulier avec Benjamin Constant. Dans cette correspondance qui s'étend principalement des années 1789 aux années 1794, on peut y lire, comme le rappelle Isabelle Vissière “entre autres qualités, une curiosité inlassable pour le politique qui leur paraît dominer, sinon diriger, tous les secteurs de l'activité humaine, de même qu'une lecture lucide des événements.”⁹⁰ Cependant, cette réflexion sur le politique qui devait réunir Benjamin Constant et Isabelle de Charrière sera aussi la cause principale de leur rupture.⁹¹ Pour

⁹⁰Cité dans Jean-Claude Bonnet, La Carmagnole des muses (Paris: Armand Colin, 1988) 7.

⁹¹Pour une analyse de la correspondance entre Benjamin Constant et Isabelle de Charrière, se référer aux ouvrages de Roland Mortier, “Benjamin Constant devant la Révolution française,” et Isabelle Vissière “Duo épistolaire ou duel idéologique?” Benjamin Constant et la Révolution française, publié sous la direction de Dominique Verrey et d'Anne-Lise Delacretaz. (Genève: Librairie Droz, 1989).

⁹²Kurt Kloocke, “Benjamin Constant et la pensée nihiliste” Benjamin Constant, Madame de Staël et le groupe de Coppet, publiés sous la direction d'Etienne Hofmann (Oxford: The Voltaire Foundation; Lausanne: Institut Benjamin Constant, 1982) 189-221. Kloocke remarque que la crise des relations entre Charrière et Constant souvent attribuée à la présence de Germaine de Staël dans la vie de Constant comme la différence fondamentale qui prend forme dans

Benjamin Constant. la Révolution met en jeu la question de l'identité et devient le sujet par rapport auquel il construit et structure à la fois avec et en opposition à sa célèbre amie son identité politique et littéraire.⁹² Et comme il le signale, il est temps en 1794. non plus de dissenter sur le politique mais de s'engager dans la politique:

Nous sommes dans un temps d'orage, et quand le vent est si fort le rôle de roseau n'est point agréable. Le rôle de chêne isolé n'est pas sûr, et je ne suis d'ailleurs pas un chêne. Je ne veux donc pas être moi, mais être ce que sont ceux qui pensent le plus comme moi, et qui travaillent dans le même sens. Les partis mitoyens ne valent rien, dans le moment actuel, ils valent moins que jamais. Voilà ma profession de foi que j'abrège parceque je suis sûr que vous ne serez jamais de mon avis . . . (IV, 457)

Cet engagement politique que Constant qualifie de "profession de foi" sert alors de point de référence à Constant pour juger Charrière à qui il reproche sa distance critique et son ironie sans complaisance. Loin de nier cette distance critique et cette ironie, Charrière les revendique et les attribue même à son "état" de sceptique. Des principes idéologiques. Charrière dit: " Il me semble qu'en nous occupant de ces choses là nous ressemblons à ces bonnes gens d'autrefois qui dans leurs écrits voulaient endoctriner les Rois qui ne les lisaient pas, et réformer les cours où l'on n'a jamais su qu'ils existâssent. ... Si vous me dites "quand tout ce que vous dites serait vrai qu'avez-vous de mieux à

les années 1794 entre eux: l'engagement politique de Constant pour les événements révolutionnaires et son éloignement d'une pensée nihiliste que Charrière défendait.

⁹²Mauro Barbéris et Giuseppe Sebaste, "Comment devenir ce que l'on est: Benjamin Constant, Madame de Charrière et la Révolution" dans : Benjamin Constant et la Révolution française, 1789-1799, publié sous la direction de Dominique Verrey et d'Anne-Lise Delacretaz (Genève: Librairie Droz, 1989) 39-60.

faire que d'écrire? Préférez-vous une inutilité évidente à une petite utilité douteuse mais possible?" Je serai embarrassée et si vous ajoutez "Achevez Brusquet, j'obéirai" (IV, 394). Brusquet est l'un des personnages de La Parfaite liberté ou les vous et les tu, une comédie que Charrière publia en 1794.⁹³ Ironiquement, on peut dire que l'impératif "idéologique" auquel Charrière se soumet s'avère être un impératif "littéraire." Comme elle le décrit ci-dessus à Ludwig Ferdinand Huber, Charrière préfère écrire une pièce de théâtre plutôt qu'exposer directement ses principes idéologiques sous forme, par exemple, de pamphlets journalistiques. L'intervention fictionnelle apparaît comme l'essentiel de l'écriture de Charrière mais marque aussi une position critique du politique. Comme Charrière elle-même l'affirme: "Mon scepticisme va toujours croissant et je pourrais en venir à n'être pas très démocrate même au sein d'une monarchie tyrannique, ni très aristocrate au milieu du Republicanisme le plus désordonné. Rien n'est si mauvais que son contraire paraît encore pire. Je pense à ces irrésolvables questions le moins que je puis et me borne à de petites indignations et pitiés individuelles, partielles, privées" (IV, 579). Le scepticisme de Charrière n'est cependant pas simplement dirigé sur "les autres," c'est-à-dire qu'il ne s'agit pas d'un jugement négatif sur "les actions désintéressées" qu'accomplissent les "autres;" le scepticisme de Charrière se porte avant tout sur tous jugements politiques qui se

⁹³Isabelle de Charrière, "La Parfaite liberté ou les vous et les tu," dans : Oeuvres complètes (VII, 367-406). La parfaite liberté est une comédie en trois actes et en prose. Dans cette pièce, Isabelle de Charrière débat de la liberté. Pour elle, la liberté idéale ne peut s'établir au prix d'une quelconque contrainte. Mais une fois encore, Charrière s'empare d'un genre littéraire pour débattre de questions politiques.

proclament être garant d'une vérité sociale. Il est donc important pour Charrière de maintenir une distinction entre ce qu'elle entend par politique et ce que Constant nomme sa profession de foi. Le politique, nous dit Charrière, est matière à jugement "objet à juger." il doit donc être sujet à dispute, réflexion et par dérivation, inscription. Par contre, dans la proposition de Constant, le politique devient une foi dans un groupe social, un parti auquel il appartient et dont il doit propager la doctrine qui s'avère être le reflet de l'accord de tous les participants .

Dans l'échange épistolaire entre Charrière et Constant, deux positions antagonistes se profilent. Si pour Charrière, le politique devient matière à réflexion qu'elle communique à travers la fiction; pour Constant il s'agit d'une prise de position perçue comme une action qui engage à suivre des principes communs: "Je ne veux donc pas être moi, mais être ce que sont ceux qui pensent le plus comme moi, et qui travaillent dans le même sens" (IV, 457). Pour Constant, la Révolution révèle un moment précis où surgit une politique particulière à laquelle il adhère et qui lui tient lieu de programme d'action. Durant la phase culminante de la Révolution, les années 1793-1794, Constant écrit: "Je n'ai pas eu le courage d'achever mon dialogue entre Louis XVI, Brissot et Marat, ... les horreurs de la France m'affligent et me stupéfient. ... mais comment voulez-vous qu'on écrive au milieu des têtes qui roulent?" (IV, 266). La question de Constant pose donc avec netteté la question la plus directe pour l'écrivain: Est-il possible d'aborder à chaud les événements tragiques que l'on vit et dont il est impossible de se détacher sur le plan affectif? Peut-on à la fois subir juger et

transposer?⁹⁴ Constant a déjà sa réponse puisqu'il arrête d'écrire des fictions. Quand à Charrière, c'est le contraire, sa production politique diminue et sa production littéraire augmente. Au début de la Révolution, elle avait commencé par écrire des pamphlets tels Observations et conjonctures politiques qui parut en 1788, et Lettres d'un Evêque français à la nation, publié en 1789. Comme le note Isabelle Vissière, dans les années 1793-1794, c'est au roman et au théâtre que Charrière se consacre.⁹⁵ Et cette dernière de conclure: "c'est la Révolution qui a révélé à Belle, ... sa vraie nature d'écrivain" (4). Chez Charrière, l'engagement dans le politique n'est pas lié de la même manière que Benjamin Constant, à un moment historique précis, ou à une idéologie particulière, mais procède d'une réflexion continue qu'elle pose sur le monde, l'histoire, la société et elle-même depuis qu'elle écrit.

Dans Les mots des Femmes, Mona Ozouf⁹⁶ remarque à propos de Charrière: "Elle a toujours repoussé la philosophie du tout et du rien: un degré de bonheur de plus ou de moins ne lui semble nullement indifférent" (58). Pour Ozouf, si Charrière accueille la Révolution d'abord avec enthousiasme, ensuite avec détachement, elle ne se départira cependant jamais de sa lucidité à interpréter la commotion révolutionnaire. Charrière est blessée de voir "l'esprit de liberté frappé de léthargie," et ajoute: "cette

⁹⁴Roland Mortier, "Un roman inachevé sur la Révolution vécue: Henriette et Richard par madame de Charrière." Online. Internet. Available <http://www.etcl.nl/Charrière /fra/sur belle>.

⁹⁵Isabelle Vissière, "Madame de Charrière et la Révolution française." Online. Internet. Available <http://www.etcl.nl/charriere/articles/vissiere.htm>.

⁹⁶Mona Ozouf, "Madame de Charrière" Les Mots des Femmes (Paris: Fayard, 1995) 52-83.

cause de la liberté si belle dans son origine, si belle en spéculation mais si gâtée par la manière dont on la plaide”(IV, 236). “L’égalité et la liberté,” continue Charrière “étaient faites pour me plaire : leur annonce trompeuse et mensongère était faite pour me séduire.” Ce qu’il faut retenir de Charrière, c’est cette attention particulière qu’elle porte à l’utilisation des termes. En 1789, les mots égalité et liberté se comprenaient comme idéaux et en tant que tels étaient ouverts à la spéculation. Ils annonçaient la possibilité d’une histoire en devenir et n’étaient pas encore porteurs d’une idéologie au service d’un parti. Mais peu-à-peu, la signification de ces termes se précise, se durcit et finalement liberté et égalité deviennent synonymes d’une idéologie concrète à partir de laquelle on juge et exclut sans appel différentes classes d’individus. Il faut donc distinguer entre la liberté et l’égalité, en tant que concepts, et la liberté et l’égalité en tant qu’instruments politiques. Malheureusement, c’est en tant qu’instruments politiques que ces concepts devenus populaires, se diffusent. Liberté et égalité, devenus alors équivalent d’“action pratique” signifient et commandent une substitution à ce qui est perçu comme le vieux, l’inégalitaire, la monarchie. Liberté et égalité sont alors partie intégrante d’un discours fondateur sur la société. Cette conception du monde qui prend place dans toute une série d’exposés est donc liée à une philosophie de l’action qui pour la sceptique Charrière donne lieu à des formes infantiles d’optimisme et de naïveté. L’écriture chez Charrière essaie donc d’interrompre ce discours qui schématise un monde en proposant une origine artificielle et une utopie naïve. À cette artificialité, Charrière répond par la fiction qui souligne de manière ironique l’aspect artificiel d’un discours fondateur.

Dans Une aristocrate révolutionnaire, Isabelle Vissière remarque: “Il suffit de parcourir les textes écrits par Belle pendant l’époque révolutionnaire pour assister à une véritable métamorphose. Cette recluse prend une carrure internationale, cette sceptique croit aux pouvoirs de la littérature ...[et] s’adonne à une production intense comme si les circonstances stimulaient son imagination et sa verve satirique”(11).⁹⁷ Ce choix délibéré de la littérature sépare Charrière de ses contemporains-écrivains qui souvent abandonnent les formes littéraires traditionnelles et optent pour des interventions plus directes comme l’écriture de pamphlets, tels, Camille Desmoulins, Marcel Dorigny, etc. ... Leurs choix illustre l’appel de Nicolas de Bonneville: “C’est de la République des Lettres que nous attendons le triomphe du Patriotisme et de la Vérité.” Il faut noter que l’activité journalistique consiste principalement à faire usage de la polémique et de l’accusation qui permettent de propager une idéologie.⁹⁸ Ces journalistes sont en quelque sorte, “ultra-réalistes” puisqu’ils essaient à travers l’écriture de mettre en mouvement des énergies nécessaires pour atteindre les buts de la Révolution ou de la Contre-Révolution. La politique présentée par les journalistes n’est en fait pour le scepticisme de Charrière que l’histoire du trompeur trompé:

Si vous pouviez détruire le scepticisme dans lequel je nage, allant et venant et m’approchant tantôt d’une rive tantôt de la rive opposée sans aborder jamais vous me rendriez assurément un grand service, mais je crains que ce service ne puisse m’être rendu parce que mon scepticisme me paraît venir de la disproportion de la capacité de ma tête avec l’objet qu’il faudrait qu’elle

⁹⁷ Isabelle Vissière, Une aristocrate révolutionnaire (Paris: Des Femmes, 1988) 11.

⁹⁸ Pour une analyse de la production journalistique au dépend du littéraire, voir: Jean-Claude Bonnet, La Carmagnole des muses (Paris: Armand Colin, 1988).

embrassât tout entier pour le juger comme il faut. (IV, 156)

Pour Benjamin Constant, les réflexions que mènent Charrière ne sont que la preuve d'une position de détachement, d'évasion, et même de compromission par rapport à la Révolution:

J'ai un peu peur que nos idées ne se contredisent plus que jamais. Ce que j'entends, ce que je vois, ce que j'éprouve, me fait faire beaucoup de chemin et je n'ai plus aucun doute, aucune hésitation, aucune impression vacillante ou sympathétique [sic] sur le sujet sur lequel nous différons. Qui veut le but, veut les moyens [...] Je ne suis point de votre avis sur l'indépendance à garder. Je sens tous les jours plus que lorsqu'on n'est pas pour quelque chose il faut être contre. (IV, 454)

Mais, la littérature, loin d'être un refuge et la preuve d'un non-engagement, est pour Charrière, la seule position critique tenable. Elle veut poser sur la révolution un jugement qu'elle décrit de "comme il faut" plutôt que d'épouser aveuglement l'une ou l'autre des positions politiques. Ce moment historique est un moment où, dit-elle: "l'on a la tête si pleine de politique [...] que l'on ne peut s'empêcher de considérer tous les objets du point de vue politique" (III, 149). Charrière avertit son correspondant que ce que l'on nomme les discussions sur le politique ne sont en fait que des discussions tautologiques sur le politique puisque "la tête est déjà pleine de politique," c'est-à-dire d'idéologie. Comment alors juger des actions révolutionnaires si l'on est déjà engagé dans un parti ou un autre?

En 1789, une nouvelle conception du monde est proposée comme substitution à l'ancienne. Pour Charrière, il s'agit donc de "critiquer" la forme rationnelle dans laquelle la nouvelle conception du monde est présentée. Si les révolutionnaires crient

table rase du passé, pour une création "ab ovo" d'un monde qu'ils rêvent de construire. n'impliquent-ils pas que le passé n'est plus seulement une erreur sociale mais aussi une erreur théorique? De plus, ce jugement porté sur le passé n'est-il pas aussi un jugement moral? Comment alors peut-on se forger des opinions, des convictions, des normes de conduite, échapper au passé et créer le présent si ce n'est alors comme Constant, en posant un acte de foi? Dans la réflexion sceptique de Charrière, le présent table rase n'est qu'une illusion, car passé et contemporanéité sont enchevêtrés dans la pensée. Il s'agit pour Charrière de rester attentive à des "annonces mensongères" et de réfléchir sur l'histoire qui se fait, la liberté sociale, la liberté politique et la naissance de l'individu politique. Déjà en 1789, Charrière disait: "je n'adore ni Voltaire, ni M. Necker, ni le peuple, ni ses représentants, et je suis beaucoup plus antiaristocrate que je ne suis démocrate" (III, 393). Et, en 1793, comme pour provoquer Constant, Charrière lui écrit: "Qu'importe que l'on soit tyrannisé par l'ambition et les intrigues des jacobins ou des jésuites ... l'acua tofana ou la guillotine tout cela m'est bien égal"(IV, 398/399). Ces réflexions ironiques sur la participation politique, et qui passent pour cyniques, ne lui attireront que très peu de sympathie des différents représentants des partis politiques et Charrière se retrouvera toujours en porte-à-faux d'une idéologie ou d'une autre. Si Charrière a une "profession de foi" c'est dans la dénonciation systématique de toute adhésion à un parti politique comme elle l'écrit à Constant:

A quoi bon nous écrire? Nous ne nous écrivions qu'à bâtons rompus sans plus nous entendre, sans nous soucier même de nous entendre. Je ne suis plus curieuse de ce que vous pouvez me dire et je ne fais ni ne sais rien qui puisse exciter votre curiosité ... Je n'aime ni votre genre de vie, ni vos amis, ni votre politique, ni celle des autres et je ne veux plus contester avec vous. Cela est dit. .. Je vous écrivais au commencement de la Révolution si vous allez à Paris et vous

affiliez à quelques sociétés. c'est fait de notre liaison. Il y a dix huit mois que je vous conjurai de ne vous mettre sous les étendards de personne ... A présent vous êtes sous des étendards ou sous des ailes et là vous raisonnez et vous écrivez. Vous ne me convenez plus du tout. et comme vous n'avez nul besoin de moi. il faut rester comme nous sommes (V, 197)

"Benjamin." expliquera-t-elle à son correspondant anglais Dudley Ryder "s'est lié avec la politique et Mme de Stael, cela nous a brouillés" (V, 442).

Cette position d'écrivain perçue politiquement comme "une oscillation entre une attitude vaguement antiaristocratique et un neutre agnosticisme."⁹⁹ s'avère être une critique qui ayant recours à l'ironie se range plutôt du côté de la mise-en garde. Déjà, dans la correspondance de Charrière, on peut lire dans ses remarques apparemment relativistes, un principe de dérision qui, contrairement à une affirmation idéologique, devient une stratégie de réflexion dans sa production littéraire. Le langage devient alors le lieu privilégié de cette réflexion.¹⁰⁰ Chez Charrière, ce qui étonne le plus, c'est ce sentiment de la complexité qui la pousse à constamment s'interroger sur l'histoire dans ce qu'elle a de plus concrêt, c'est-à-dire les événements qui se déroulent mais à travers une réflexion sur la pensée c'est-à-dire le langage utilisé pour décrire les événements. L'écriture chez Charrière ne se contente donc pas de dénoncer sur le ton ironique des idéologies politiques figées dans certaines utilisations conceptuelles. Au départ, ses

⁹⁹Barbérís et Sebaste, 55.

¹⁰⁰La stratégie littéraire de Charrière, note Ozouf, reflète son "obsession" de la liberté. "On peut . . . rapporter à l'obsession de la liberté la difficulté . . . qu'elle a à boucler ses récits, incertains et décousus comme la vie même. ... Isabelle déteste cadénasser ses romans et immobiliser ses héroïnes : pour l'individu libre, il n'y a pas de mot de la fin." Ozouf, 73.

personnages se présentent comme appartenant à une communauté politique jacobine ou aristocrate, à une catégorie sexuelle (femme, homme), à un groupe familial (parents, enfants). La fiction permet alors à Charrière de présenter des groupes qui conservent une façon d'agir et de penser fidèle à des représentations connues et qui garantissent donc un semblant d'identité. La Révolution est alors introduite comme élément extérieur, produisant une fissure dans cette identification qui semblait inamovible. Dans une première phase, les personnages sont alors amenés à confronter le problème de penser leur situation présente avec une pensée politique élaborée dans des écrits prédatant les événements eux-même. Dans ce monde d'avant la Révolution, les croyances des personnages étaient unies dans une conception du monde et une norme de conduite. Les événements se chargent de créer une fissure dans cette union de pensée et d'action. Et le travail de leur pensée qui tient à la fois compte du passé et du présent se met alors en place. Si l'utilisation de l'ironie dans l'oeuvre de Charrière prend parfois les apparences du cynisme à l'égard des principes et de la déception découlant d'un caractère impossible à fixer, elle ne s'arrête pas à cette fonction. L'ironie est plus qu'un jeu de langage, un jeu d'esprit. C'est un mode de réflexion qui modifie et redresse dans les discours des uns et des autres tout aspect mystificateur, et illusoire sur soi-même et sur les autres. On peut même ajouter que l'ironie modifie en quelque sorte la pensée.

Dans "Duo épistolaire ou duel idéologique,"¹⁰¹ Isabelle Vissière parlant de la correspondance entre Constant et Charrière écrit: "ces épistoliers sont des historiens présents" Une remarque que Charrière elle-même s'attribue quand dans

¹⁰¹Vissière, 23-37.

une lettre à son amie Henriette l'Hardy, elle décrit:

Il fallait moins croire et mieux calculer; il fallait prévoir toutes les possibilités et mettre les points sur les i. C'est là un des grands travers de mon esprit. Je traite la vie réelle des hommes comme la vie fictive des personnages de romans. Je néglige et ce qui est encore plus fou je dédaigne les détails, comme si je pouvais en n'y pensant pas ôter les menues circonstances de la vie, qui n'est qu'un tissu de menues circonstances. C'est comme si en ne voyant pas les pierres qui rendent un chemin raboteux et surtout en n'en parlant pas, je prétendais aplanir le chemin ... Si je suis aveugle sur ce qui doit arriver, je ne le suis pas sur ce qui arrive et mon romanesque dédain cède à la peu romanesque réalité alors l'exalté romancier devient chez moi historien fidèle et comme les bagatelles prétendues ont dans le fonds une influence aussi grande sur le sort de chacun de nous et sur la grande machine que ce que nous appelons de grands événements, je recueille et je pèse tout et j'ai la ponctualité et la franchise de tout dire. (III, 515)

Doutant et même aveugle sur le futur, Charrière ne peut livrer à sa correspondante aucune vérité, ni aucune certitude sur les événements qui se déroulent, ni sur ce qui pourra arriver. Néanmoins, son "dédain romanesque," souligne-t-elle, n'en devient pas moins dans ses récits qui tiennent compte de "menus détails," de l'Histoire. Comment comprendre ce paradoxe? d'un côté l'effacement de toute possibilité de communiquer une vérité historique et de l'autre une affirmation à être dans ses descriptions une historienne fidèle? Comment comprendre ce rapport entre histoire et littérature, cette convergence de deux disciplines qui à première vue ne semblent pas pouvoir se recouper? Car si l'on suit cette opposition énoncée depuis Aristote, l'histoire s'occupe de représenter les choses comme elles sont; la fiction, les choses comme elles pourraient être. Si la distinction aristotélicienne propose l'histoire comme la représentation de ce qui se passe et la fiction comme représentation de l'imagination, Charrière dans ses romans épistolaires s'empare de l'histoire mais pour s'y référer de manière elliptique par l'inscription de dates dans un ordre chronologique en haut de page et sous l'égide

desquelles un personnage entreprend son récit à la première personne. Charrière présente donc à la fois une rupture entre récit et histoire¹⁰² mais aussi une convergence. En effet, chez Charrière, il y a une volonté de préciser que l'histoire racontée relève tout autant de l'imagination dans l'énoncé, que de l'histoire "réelle" dans la présentation. La réalité historique est donc à la fois séparée et comprise dans l'énoncé qu'en fait le narrateur. Mais ce qu'il faut souligner chez Charrière, ce n'est pas qu'elle pense que tout événement historique relève de l'imagination de l'écrivain ou que l'imagination se plie aux exigences de l'histoire, mais qu'histoire et imagination sont imbriquées l'une dans l'autre et surtout que dès qu'il y a écriture surgit un tiers domaine celui du littéraire avec ses conventions stylistiques, et sa rhétorique. Pour Charrière, une écriture qui ne serait que descriptions de la réalité est un appauvrissement: "L'imagination se désèche en voyant tout ce qui est . . ." (III, 231/232) et encore "Dans ce moment le monde politique est tout le monde littéraire n'est rien. Voltaire et Rousseau eux-mêmes ne se feraient plus entendre au milieu du bruit qu'ils ont excités" (IV, 400).

Dans The Writing of History,¹⁰³ Michel de Certeau suggère qu'histoire et fiction sont quasi identiques. Le désir des historiens de rendre compte d'un savoir total ou même partiel sur une période donnée, affirme Certeau relève du mythe: "like the fictionner who fabricates worlds of words that cannot fit the ends of a practical scheme,

¹⁰²Se référer à l'article d'Hayden White "The Value of Narrativity in the Representation of Reality," On Narrative, (Ed. W.J.T. Mitchell, Chicago: U Chicago Press, 1981) 1-25.

¹⁰³Michel de Certeau, The Writing of History, tr. Tom Conley (New York: Columbia University Press, 1988), XI.

the historiographer is a “poet of details” who endlessly plays on the chords that a rare composition awakens in a network of knowledge” (XI). Comme l’historiographe de Michel de Certeau, Charrière va donc décrire les événements qui arrivent tout en restant attentive à la manière dont elle fait passer ces événements dans l’écrit. Pour le faire, il est nécessaire d’accorder une attention particulière à la construction et à la forme données à la réalité décrite, qui pour Charrière proviennent du domaine littéraire. Comme elle-même le souligne, chaque “détail” rapporté peut être à la fois historiquement “vrai” et en même temps formé par son imagination imbibée de lectures présentes et passées. Charrière prétend “tout dire,” pourtant sa dernière phrase suggère que ce qu’elle dit dépend à la fois entièrement de son choix et en est en même temps entièrement indépendant. S’il lui est possible de faire un choix, l’expression et la forme à donner à ce choix n’est pas libre. Il dépend de l’utilisation d’une rhétorique et d’un style établis. Charrière laisse entendre qu’elle trans-“écrit” les événements en jouant avec eux dans son imagination, et en les coulant dans des formes littéraires connues. Elle est bien historienne mais historienne qui se situe dans la littérature plutôt que l’histoire. La littérature devient alors une métaphore pour la distance qui existe entre ce qui “est arrivé,” et ce qui est raconté. Comme le rappelle Lacan: “Cette illusion qui pousse à chercher la réalité au-delà du mur du langage est la même par laquelle le sujet croit que sa vérité nous est déjà donnée, que nous connaissons à l’avance, et c’est aussi bien par là qu’il est béant à notre intervention objectivante.”¹⁰⁴ Chez Charrière, les représentations du politique ne peuvent être tenues pour “vraies,” puisque le réel est

¹⁰⁴Jacques Lacan, Écrits (Paris: Seuil, 1966), 308.

sans arrêt "médiatisé" par le langage et la pensée. Comme le souligne Hayden White dans Tropics of Discourse: "As a symbolic structure, the historical narrative does not reproduce events it describes; it tells us in what direction to think about the events with different emotional valences . . ." (91). Cette phrase pourrait s'appliquer à Charrière dont le "récit historique" a une fonction de médiation. En appliquant à son récit une intention, Charrière nous engage à y lire sa décision de représenter un événement plutôt que la représentation directe d'un événement. Charrière veut donner une signification à l'événement, c'est-à-dire communiquer sa compréhension et son appréhension de l'événement et non pas influencer l'événement. Utilisant alors l'ironie comme facteur de distortion, Charrière peut présenter des principes idéologiques sans jamais en exposer le bien fondé.

Mais que veut dire écrire la Révolution sous l'égide de l'ironie? Comme nous allons l'examiner, il s'agit à la fois d'une utilisation classique de l'ironie à la manière d'un Voltaire ou d'un Swift et d'une utilisation qui pourrait être qualifiée de plus moderne. L'ironie chez Charrière lui permet de prendre du recul non seulement du côté du subjectif mais aussi du côté du rationnel. A l'ironie d'un Voltaire qui est contenue dans la phrase et qui est déterminée presque mécaniquement dans une mise-en-scène ridicule qui souvent prend la forme du dialogue, Charrière développe l'ironie sur un mode inédit. Il ne s'agit plus d'une certaine légèreté envers la vie qui permettrait de garder bonne conscience tout en n'étant pas dupe des pièges de l'existence. L'ironie de Charrière à l'instar d'un Voltaire ou d'un Swift est social, elle permet de mettre en défaut le système de convention sur lequel reposent les rites sociaux, mais fait aussi

apparaître combien le désir de chaque individu de s'affirmer comme individu dans une société ou un groupe qui ne cherche qu'à l'en empêcher est un désir valide.

La réflexion chez Charrière n'est pas un simple jeu de miroirs, où la pratique d'un langage rationnel renvoie à un narrateur qui communiquerait un message de l'auteur en attendant que son interlocuteur fasse de même. Chez Charrière, la communication fait des interlocuteurs dans ses romans, des complices des lecteurs qui partagent une réflexion à partir du discours politique situé en dehors du roman mais qui s'impose à la fiction.

Le roman épistolaire qui par sa forme peut être qualifié de roman de la césure, permet à Charrière non seulement de dévier d'une signification d'un discours politique qui "va de soi," mais de glisser vers une autre signification. On pourrait rapprocher la technique de Charrière de celle de Luce Irigaray dans Speculum de l'autre femme¹⁰⁵ et dire que Charrière tend un *speculum* aux discours idéologiques qui s'affrontent. En retraversant les discours soit monarchiens, soit républicains, Charrière repère comment se déterminent les métaphores qui véhiculent désormais le sens de l'histoire. Et dans ce discours de l'histoire, Charrière essaye de marquer les exclusions, les élipSES, et d'en altérer l'économie. Comme nous allons le voir, il s'agit avant tout de rester attentif à la dimension romanesque des discours politiques. Charrière garde donc comme tropes principaux, l'ellipse et l'ironie qui lui évitent une articulation intellectuelle basée sur

¹⁰⁵Luce Irigaray, Speculum de l'autre femme (Paris: Editions de Minuit, 1974).

une position idéologique. Dans Henriette et Richard¹⁰⁶. Charrière fait dire à l'un de ses personnages: "Le roturier invente le noble, tel que vous vous le représentez. L'homme invente la femme, on s'agenouille devant une chimère de sa propre invention, devant des hommes que l'imagination a parés de vertus auxquelles ils ne pensent pas, devant un sexe paré de vertus qui lui sont étrangères. Oui rien n'est si sûr, si vrai, si évident. Pour vous en convaincre, jugez tour à tour des effets par la cause de la cause par les effets" (VIII, 398). Ce qui pourrait passer pour des essences ne sont alors que de simples reflets de désirs ou de crainte. Il n'est pas question de nier les différences, rappelle Charrière, mais il faut être attentif à ce que l'on nomme différences. Si Charrière met en garde contre le fait de naturaliser, d'essentialiser ces différences au risque de les durcir et d'y emprisonner les individus, elle demande surtout que soit menée une réflexion sur ce que constitue ces différences qui s'avèrent être souvent amalgames romanesques et projections imaginaires.

Mais rappelons-le, l'épistolarité souligne aussi l'émergence des destinées individuelles dans la littérature, des singularités empiriques, stimulant l'identification du lecteur.¹⁰⁷ L'utilisation de l'épistolarité par Charrière prend alors tout son sens

¹⁰⁶ Henriette et Richard est un roman inachevé de Charrière qu'elle écrit vers 1792. Elle y développe des théories politiques, esthétiques et aussi pédagogiques. Elle y parle de cette recherche qu'elle mène dans l'écriture et explique son choix pour le roman épistolaire: "La simple narration toute naturelle qu'on la rende, montre toujours l'auteur, et ne lui permet aucun écart, tandis que des lettres donnent à l'imagination tout son essort et sont parées même de leur abandon de leurs écarts, de leurs négligences" (VIII, 272-273).

¹⁰⁷ Voir François Jost, "L'évolution d'un genre: Le Roman épistolaire dans les Lettres occidentales," : Essai de littérature comparée, II, Europeana, (Fribourg: Edition Universitaire de Fribourg; Urbana: University of Illinois Press, 1968) 112-

puisqu'elle permet de souligner cette "errance" entre réel et langage.¹⁰⁸ En employant la forme épistolaire, c'est-à-dire la forme d'une parole qui s'adresse, Charrière refuse de se lancer dans une aventure politique sous forme de discussion qui se consacrerait à débattre du "destin" des personnages et ne serait alors que la présentation ou recherche d'un nouveau système de valeurs. Ainsi voit-on que toute discussion politique repose sur des énoncés singuliers représentés par chaque narrateur/narratrice qui répondent aux questions que soulèvent pour eux les événements historiques qui s'enchainent.

Pour Barberis et Sebaste, l'écriture épistolaire, "s'inscrit dans le choix ironique et transgressif d'une énonciation qui prend en charge la mobilité du discours qui la traverse, une discontinuité qui a valeur tactique et stratégique, une constante disponibilité aux ouvertures narratives, aux digressions, qui enfin reflète l'esprit d'une errance de l'auteur et sa passion pour le jeu" (44). Mais qui, ajouterons-nous, est avant tout la forme la plus appropriée que peut prendre les questions d'un esprit sceptique. Il s'agit donc de poser un jugement politique singulier. Pour ce faire, ce jugement doit tenir compte de ses présupposés non seulement idéologiques mais aussi littéraires, ce

113.

¹⁰⁸ Michel Delon, "Lettres trouvées dans des porte-feuilles d'émigrés ou l'éloge de l'amphibie," : Une Européenne: Isabelle de Charrière en son siècle (Hauterive, Neuchâtel: Editions Gilles Attinger 1994) 197-207. Comme le souligne Michel Delon dans "Lettres trouvées dans des portefeuilles d'émigrés ou l'éloge de l'amphibie," Charrière ne cherche pas à différencier les titres de ses ouvrages et utilise fréquemment le mot "lettres" qui "[...] semble souligner une communauté formelle de tous ces textes, qu'ils soient romans ou interventions politiques" (197/198). Aussi est-il important de retenir, que l'emploi du mot Lettres souligne la volonté de Charrière de marquer la présence continuelle du destinataire dans ses oeuvres.

qui signifie qu'il faut rester attentif à la manière dont les événements sont mis en signification plutôt que par la signification des événements eux-même. L'important pour Charrière est de souligner ce rapprochement délibéré entre le discours romanesque et discours révolutionnaire ou contre-révolutionnaire.

Northrop Frye¹⁰⁹, dans Anatomy of criticism, conçoit les récits fictifs comme un conglomérat de "sublimates of archetypal myth-structure" (15). Ces structures déplacées à l'intérieur du langage fictif se retrouvent dans toute l'histoire littéraire, affirme-t-il. Donc, selon Frye, la signification fondamentale de toutes les fictions, leurs contenus thématiques dérivent d'un corpus de littérature Classique et Judéo-Chrétien. Cette définition de la fiction comme un amalgame de structures et d'archétypes est fondamentale à l'expérience critique de Charrière: En effet, cette dernière s'empare de situations littéraires archétypales comme la figure du couple pour, d'une part déconstruire les représentations traditionnelles du couple dans la littérature, et d'autre part pour l'utiliser comme métaphore pour représenter sa propre vision politique et sociale. Ce qui ressort de l'effort littéraire de Charrière est un travail de la pensée qui pose des limites à la fois au mythe littéraire pour reprendre le terme de Northrop Frye et à l'histoire qui peut facilement glisser vers le "mythe" dans son discours. On peut dire des romans de Charrière, que leur récits pointent en tant que systèmes de signe simultanément dans deux directions: les événements historiques et l'archétype romanesque.

¹⁰⁹Northrop Frye, Anatomy of Criticism (Princeton: Princeton University Press, 1957).

On peut parler dans le cas de Charrière. "d'une littérarité du discours politique."¹¹⁰ Si depuis les études de Michel Foucault et de Michel de Certeau, on sait que les discours, tels ceux du pouvoir politique, de l'enfermement ou de la sexualité peuvent être lus obliquement, Charrière, elle met en pratique cette vision du politique qui doit se lire "obliquement." Les romans de Charrière montrent que la politique n'est pas une simple communication de principes idéologiques. En plaçant la politique dans le domaine de l'imagination, Charrière y ajoute un supplément de sens et nous offre sa lecture oblique. Au lieu de présenter de la politique, une signification qui va de soi, Charrière nous présente une réflexion opaque qui se pose sur le contenu et sur l'expression. Les représentations de l'histoire et du politique sont alors soumises à une organisation stylistique et à une certaine rhétorique comme nous allons l'examiner dans Lettres trouvées dans les Portefeuilles d'émigrés.

Alors que Charrière se met à l'écriture des Lettres trouvées dans les Portefeuilles d'émigrés, Charles Godefroy de Tribolet, chancelier de la principauté de Neuchâtel lui demande de rédiger un libelle pour apaiser la population qui dans la région neuchâteloise se déchirait entre deux factions rivales, les jacobins et les monarchiens. Charrière se met immédiatement au travail et c'est un roman épistolaire qu'elle produira, qui consiste entre un échange de lettres entre un français et un suisse et qui s'intitule Lettres trouvées dans la neige. Ce roman innove sur un point important, puisqu'il s'agit non d'un simple commentaire sur les événements qui se déroulent en Suisse mais d'utiliser politiquement la fiction comme moyen de réflexion, si ce n'est

¹¹⁰ Barbéris et Sebaste, p.57.

même de persuasion. En effet, cette fiction romanesque propose l'histoire de deux amis qui s'interrogent sur les événements de la Révolution et se demandent où ils pourraient vivre.

Si l'écriture du roman a été sollicitée par des événements historiques, le roman se situe néanmoins en deçà d'une description de prises de position sur la Révolution puisque s'y constitue, par la rhétorique de l'amitié, un discours proprement romanesque, qui, s'il rejoint le discours révolutionnaire par les fins qu'il poursuit, c'est-à-dire trouver un nouveau *modus vivendi* pour la communauté, n'est cependant pas redevable de ses énoncés au discours révolutionnaire. La réflexion politique s'y dit à travers le récit des personnages dont les élans d'amitié mettent en jeu non pas les institutions monarchiques ou républicaines mais leurs propres croyances et engagements politiques. Les romans d'Isabelle de Charrière ne tirent pas leurs formes de mots d'ordre politiques ou de représentations idéologiques, mais se fondent sur des questions contemporaines sur le "devenir historique." Cette réflexion sur le "devenir historique" nous conduit au roman "historique" le plus connu d'Isabelle de Charrière sur la Révolution: Lettres trouvées dans les portefeuilles d'émigrés.

Dans Lettres trouvées dans les portefeuilles d'émigrés, des événements historiques, Charrière ne cite que des dates. Placées en tête de chaque lettre, ces dates rappellent les événements sans jamais les décrire. Les Lettres sont datées du 19 avril au 2 juillet 1793,¹¹¹ et le livre paraît fin août, début septembre 1793. "L'originalité du

¹¹¹ A Critical Dictionary of the French Revolution, ed. By François Furet and Mona Ozouf, trans Arthur Goldhammer, (Cambridge, Massachusetts, London, England: The Belknap Press of Harvard University Press, 1989). En 1793-1794,

roman.” note Colette Piau-Gilot dans la préface écrite pour les Lettres: “tient en grande partie, à la confrontation permanente du réel immédiat et de l’imaginaire. L’auteur relate l’actualité sous forme romancée et juge les événements révolutionnaires en pamphlétaire et en moraliste.”¹¹² Pourtant cette réalité immédiate est tenue à distance puisqu’elle est rappelée dans des dates mais élidée dans le récit qui loin d’être une simple exposition ou dénonciation de différents discours politiques devient un récit littéraire, sous la forme d’un roman épistolaire. L’utilisation de l’épistolarité comme forme littéraire permet alors une distance par rapport à l’objet dénoté (la Révolution française ou plus précisément les discours politiques de cette période) mais élidé. Si les discours sur la Révolution (qui serait l’objet réel du récit) s’effacent, ils le font pour laisser place au sujet parlant, qui sous la forme de différents narrateurs qui s’expriment en utilisant le pronom à la première personne du singulier, essaient de poser un jugement sur cette épopée nationale en soulignant dans les différents discours révolutionnaires ou contre-révolutionnaires les éléments conventionnels, idéologiques, et stéréotypés de ce “nouveau” social qui se révèlent alors “stylisé” à l’extrême. Cette

la République française est en guerre contre l’Angleterre l’Espagne et le Prince d’Orange. A l’intérieur de la République, les royalistes réfugiés en Vendée se soulèvent. Dumouriez, général de l’armée républicaine trahit la République et passe à l’ennemi. Les différentes factions républicaine Girondins et Montagnards s’opposent à Paris à la tribune de la Convention. Un comité de Salut Public est créé. En juin, les Girondins convaincus de conspiration sont envoyés à l’échafaud. Cette période précède de peu l’instauration de “la terreur” mise à l’ordre du jour en septembre 1793, qui se poursuivra par l’élimination des différentes factions dont les Jacobins eux-même, Robespierre, Saint-just et Couthon en juillet 1794.

¹¹²Colette Piau-Gillot, “Préface,” dans Isabelle de Charrière. Lettres trouvées dans des portefeuilles d’émigré (Paris: Côté-femmes, 1993) 8.

pseudo-cr ation d'une identit  politique, nationale, familiale "nouvelle" se r v le non pas comme identit  en tant que telle mais comme l'id e d'une identit , c'est- -dire un simple spectacle pour les narrateurs. S'efface donc la question du "nouveau" politique comme identit  nouvelle. La litt rature permet alors autre chose qu'une connaissance et le roman  pistolaire devient alors le lieu m me o  se d truit et se renouvelle le code social.

Quand para t Lettres trouv es dans des portefeuilles d' migr s en 1793,

Charri re se heurte   des difficult s.¹¹³ Si dans le monde francophone, la critique port e sur les Lettres est plut t n gative: c'est une oeuvre jug e "trop" partisane: "trop aristocrate, disent les uns, "trop" r publicaine disent les autres, c'est en Allemagne, dans le journal de la Gazette d'Iena (*Allgemeine Literatur-Zeitung*) o  les Lettres sont publi es d'apr s une traduction de Ludwig Huber, qu'elles connaissent enfin un certain succ s: "Auf den ersten Anblick, f hlten wir uns versucht, diese Correspondenz hier am

  Isabelle de Charri re avait tent  de faire publier son ouvrage   Constance, o  on le lui refusa. A Neuch tel, ses lettres sont jug es trop "r publicaine": "Fauche n'a pas voulu imprimer ces lettres, elles  taient   son avis d'un r publicain enrag . Ce n'est point cel , et pas un jacobin n'en serait content mais on n'y m nage pas les  migr s, ni en g n ral l'artistocratie" (VIII: 411) et   Gen ve, trop "aristocratique": "Elles  taient trop aristocrates comme   Neuch tel trop d mocrates" (IV: 323). Ces difficult s font dire   Charri re, dans une lettre adress e   Benjamin Constant: "Il se peut bien que les deux c t s d'enrag s d daignent mes lettres et moyennant cel  elles pourront passer entre eux sans qu'on y touche, o  si elles sont touch es ce sera comme un pauvre soldat passant par les baguettes entre deux haies de frappeurs. Il en sera ce qu'il pourra" (IV: 179). Les lettres seront cependant publi es gr ce   l'intervention de Benjamin Constant qui trouve un imprimeur   Lausanne. Malheureusement l' dition souffre de nombreuses fautes dont Charri re se plaint am rement   Constant: "Si on r imprimait je voudrai bien revoir les  preuves. Vous avez pris beaucoup d'excellentes qualit s et n'avez perdu qu'un tr s petit talent, celui de correcteur d'imprimerie" (VIII: 412).

unrechten Orte zu finden. Wie bald aber, wie bald waren wir damit ausgesohnt! Welche hoehe Simplcitaet und Naïvetaet herrscht in einigen von diesen Briefen, welche Energie, welcher freie Geistesschwung, welche Charactergrosse in andern! Ein solches Product steht allenthalben an seinem Platze. Selbst dem, der bloss nach Politik darinn sucht, kann man mit Recht versprechen, dass er zwar "nicht vieles, aber viel" finden wird. Besonders geben die vortreflichen Briefen der [sic] Fonbrune, oft ganz unerwartet, Stoff zu den tiefsinnigsten und fruchtbarsten Betrachtungen" (VIII, 412/413).¹¹⁴ Au premier abord, cette critique paraît paradoxale puisqu'elle rapporte que dans ces Lettres, on ne trouve pas "beaucoup mais on trouve beaucoup de politique" "nicht vieles aber viel.Politik" Comment comprendre l'utilisation de l'adverbe "viel" et de l'adjectif "vieles," qui tous deux se réfèrent au même terme "Politik?" Il y a pourtant une différence qui, comme nous l'avons cité plus haut, se trouve entre le domaine de la reflexion politique et la politique en tant qu'instrument permettant une action. Il s'agit donc pour le journaliste allemand de rendre hommage non pas à la politique à laquelle Charrière adhérerait mais au jugement qu'elle porte sur le domaine politique. Et comme le compte-rendu en allemand le souligne, ce jugement se base sur des observations profondes et fructueuses "tiefsinnigsten und fruchtbarsten Betrachtungen." Cette analyse

114 Au premier abord, on serait tenté de considérer que cette correspondance est inappropriée. Mais, comme rapidement on s'y réconcilie Quelle grande simplicité et naïveté règnent dans quelques unes de ces lettres, quelle énergie, quelle libre envolée de l'esprit, quelle noblesse de caractère [règnent] dans d'autres [lettres]. Une telle oeuvre est toujours appropriée. On peut promettre avec raison, même à celui qui n'y chercherait que de la politique qu'il n'y trouvera pas de "beaucoup, mais beaucoup." En particulier, les excellentes lettres de Fonbrune donnent souvent d'une manière tout à fait inattendue matière à réflexions profondes et fructueuses. My translation.

correspond même à l'intention de l'auteur puisque comme le note Charrière dans sa correspondance : "l'éloge de mes petits émigrés . . . est tellement agréable et flatteur et conforme à ce que je souhaitais qu'on en pensât, à l'intention que je souhaitais qu'on y reconnût qu'en mille ans aucun journaliste n'a fait autant de plaisir à un auteur dont il appréciait l'ouvrage. Je suis payée à cette heure pour trouver que le goût allemand est le bon goût"(V. 52). Ce qui est en jeu dans les Lettres, comme le rappelle le journaliste allemand en accord avec Charrière, c'est bien les observations que les "petits émigrés" font sur le domaine politique. La lecture du journaliste allemand s'oppose aux critiques faites dans le monde francophone qui dénonce les faibles propositions d'un discours politique.

Dans ce roman épistolaire, les narrateurs essaient de comprendre, au-delà d'une simple adhésion à un programme politique comment les différents partis politiques, et en particulier les jacobins et les monarchistes perçoivent la Révolution et ses relations à des systèmes de gouvernement tels la monarchie ou même l'ancienne République romaine. Ces personnages se mettent alors à rêver à une stratégie du renouveau politique, qui ne se vit pas simplement sur le mode d'une proclamation de libération de l'ancien monde politique. Charrière va démontrer que nul "nouveau" ne se constitue sans inventer d'une part son rapport à l'ancien et d'autre part sans projeter dans ce "nouveau" tout un savoir politique qui provient non seulement du domaine de la philosophie politique mais aussi du domaine littéraire.

Les personnages du roman sont présentés comme étant le produit d'une convention historico-culturelle, membres d'une communauté définie par un milieu telle

la noblesse ou la roture, la société de cour ou celle de la ville. Ces milieux conditionnent leurs choix idéologiques puisque suivant la communauté dont ils font partie, ces personnages appartiennent au monde politique des Jacobins ou des Emigrés, des nobles restés en France ou des roturiers et même au monde de l'église. Mais la Révolution crée une fêlure dans cette identité. A cause de la guerre et de l'émigration, ils se retrouvent en dehors de leur communauté, parfois même en dehors de leur pays. La guerre civile éclate à l'intérieur de la République en Vendée entre Chouans et Républicains et à l'extérieur où la jeune République se bat contre la coalition des Princes. Chaque narrateur représente un monde de croyance particulière: Laurent Fonbrune, le plébéien se trouve en Vendée où il combat dans les rangs républicains. Blessé, il est conduit au château le plus proche où il loge chez des aristocrates restés en France. Germaine, une jeune aristocrate, se trouve en Angleterre où elle cotoie les émigrés français et la gentry anglaise. Sa soeur Pauline est restée en Vendée avec sa mère, dans le château ancestral, occupé par les troupes républicaines que dirigent Laurent Fonbrune. Le père de Germaine et Pauline, le Marquis de *** se bat dans l'armée du Prince de Condé à la frontière Est du pays. Alphonse, le fiancé de Germaine, accompagné de son précepteur, L'Abbé des ***, un prêtre réfractaire a trouvé refuge en Suisse. Alphonse refuse de s'enroler dans l'armée des Princes et de marquer ainsi son adhésion à la contre-révolution. Séparés de leur milieu respectif, déplacés dans de nouvelles communautés, isolés, ils font face à de nouveaux rapports politiques et de nouvelles conditions de vie.

Au gouvernement, les révolutionnaires essaient de donner forme à la politique

française en créant une image positive du peuple qu'ils tirent de leurs comparaisons avec les héros des révolutions précédentes et en particulier avec les héros de la Rome antique.¹¹⁵ Les discours des Révolutionnaires tels que ceux de Robespierre ou de Saint-Just soulignent les similarités entre une vision moderne de la République et une conception "romaine" de la République. Cette identification est problématique pour le personnage républicain Laurent Fonbrune:

On parle à tout propos de Rome, mais Rome n'était qu'une toute petite ville quand l'amour de la patrie s'y établit avec la religion; et cette petite ville ne ressemblait pas plus à la capitale de la France que le premier Brutus ne ressemblait aux citoyens Pétion, Santerre, Chaumette, etc. etc.. Voilà, cher Alphonse, le chaos de ma tête, non pas éclairci mais étalé devant toi. (VIII, 465)

Pour lui, les révolutionnaires se sont emparés d'un idéal (la République de l'ancienne Rome) qu'ils veulent reproduire dans une époque où les conditions historiques sont bien différentes. Si le discours révolutionnaire souligne la ressemblance entre passé et présent, Laurent en souligne la dissemblance, et montre par là que pour les Révolutionnaires, l'évocation du passé relève plutôt d'un désir de persuasion du bien-fondé de leurs actions. On peut donc dire que le discours révolutionnaire assume une fonction rhétorique plutôt qu'explicative puisqu'il se réfère à l'aspect circonstanciel des Révolutions plutôt qu'à la signification de celles-ci. Cette circonstancialité imaginaire rend au fait révolutionnaire sa place dans l'histoire Romaine "inventée" et l'existence

¹¹⁵Pour une analyse détaillée de ses images se référer à Jean-Marie Goulemot, Discours, Histoire et Révolution, 10/18.(Paris: Union Générale d'Édition, 1975) et Keith Michael Baker, Inventing the French Revolution (Cambridge, England: Cambridge University Press, 1990). Particulièrement: Part III "Toward a revolutionary lexicon" (203-307). Voir aussi Jean Starobinski, Les emblèmes de la raison (Paris: Flammarion, 1979).

des révolutions passées assurent alors l'existence de la Révolution présente, dans des espaces familiers. Et c'est à Laurent, le jacobin de dénoncer le discours politique révolutionnaire:

Il y a dans ma tête un chaos qu'en vain j'essaye de débrouiller. Je ne sais quoi me choque dans l'ordre des choses qu'on projette. On parle d'égalité, comme si nous étions au premier âge du monde, et l'on multiplie les lois répressives, dont on n'a tant de besoin que dans un siècle de grande corruption. On semble vouloir se rapprocher de la nature; on en appelle sans cesse à la nature, et on affaiblit tous les liens naturels. . . . Souviens- toi Alphonse, de ce que je te dis, . . . que j'aurais exposé ma vie pour sa pieuse belle-mère pour sa gentille et naïve Minette plus volontiers que pour l'indivisible République et l'invisible liberté et l'impossible égalité. Veux-tu savoir, Alphonse, l'histoire de mon refroidissement pour ces belles choses ? Elle me ferait peu d'honneur auprès d'un philosophe mais elle touchera un ami : d'ailleurs si la fable est ce qu'elle veut, l'histoire est ce qu'elle peut; et je suis si loin de vouloir usurper une estime non méritée, que je te montrerai ma faiblesse plutôt que je ne te dirai mes raisons. (VIII, 462)

Ce que Laurent montre alors c'est que dans ce devenir historique, le récit remplace l'histoire, l'idéologie remplace la réflexion. Les idées de liberté et d'égalité sont devenues des idéaux qui ne peuvent fixer Laurent car entre temps il est devenu amoureux d'une aristocrate ce qui problématise de façon fondamentale son adhérence à ces idéaux. Son identité personnelle devient alors chaotique puisqu'elle ne peut se construire à partir d'éléments fixes: "Réformer le gouvernement lorsque en même temps on corrompt les mœurs, me paraît trop impossible; et à moins que nous ne devenions et meilleurs et plus graves, nous ne serons jamais que comme des marionnettes à demi pourries, que le moindre mouvement fait aller tout de travers" (VIII, 432). Il s'agit alors pour Laurent d'envisager un projet de société dont la formation se fait à partir d'une certaine morale humaniste, mais qu'à son tour Laurent ne développe pas dans des

conceptions précises.

Dans les Lettres, s'il est impossible de voir l'expression d'une certaine interprétation de la Révolution, voire d'un certain libéralisme, il est cependant possible d'y voir à l'inverse le procès d'une identité politique qui se structure dans une opposition binaire telle Rome-Paris, nobles-jacobins, liberté-esclavage. Cette opposition binaire et rigide est désignée par les narrateurs comme principe d'aliénation. La "liberté" pour les personnages de Charrière se révèle n'être qu'une conscience d'eux-même, qu'ils gagnent à travers leur rencontres. Dans Les Lettres les personnages sont liés à une interprétation de l'histoire et du politique que l'on ne peut dissocier de leur nature morale. Les personnages, toujours confrontés à des événements historiques n'en peuvent changer la réalité mais peuvent les interpréter. Ils refusent de se soumettre à une ligne d'action ferme ce qui leur vaut d'être dénoncés comme "êtres- amphibies," comme "raisonneurs": "Les êtres amphibies sont ce que j'aime le moins dans la création" s'écrie l'aristocrate Marquis de, père de Germaine. Et continuant sa tirade contre Alphonse, qui refuse de s'engager dans l'armée du Prince de Condé pour lutter contre les républicains, le père déclare: "il s'est embarassé l'esprit de trop d'études et de raisonnements qui n'ont rien de commun avec la vocation et des devoirs d'un brave gentilhomme. Germaine n'a-t-elle pas été infectée aussi de cette maudite manie de raisonner sur tout!" (VIII, 436). Comme le montre l'aristocrate monarchien, les personnages principaux des Lettres trouvées dans des portefeuilles d'émigrés sont bien plus préoccupés par leurs réflexions sur le politique que par leurs actions politiques. La conséquence de cet engouement pour la réflexion fait que les personnages ne peuvent

souscrire ni à l'idéal de société proposé par les monarchiens, ni à celui des républicains. Empreints de scepticisme, ils ne peuvent s'empêcher de remarquer les ambiguïtés dans les multiples discours politique. Cependant si ils critiquent la Révolution qui se met en place, ils n'en sont pas moins reconnaissants à la Révolution de détruire l'ancienne monarchie.

Il faut encore souligner que l'évocation du passé que ce soit l'ancienne Rome ou la Monarchie sert de mise-en-scène que les personnages présentent comme une représentation théâtrale. Par exemple, l'aspect "dramatique" d'une représentation de la République romaine prend sa forme littéraire quand la Rome invoquée par Laurent devient celle de Corneille:

Oui, soyons amis, Cinna c'est moi qui t'en conjure. Qui de nous deux est le Cinna? Qui de nous deux est l'Auguste? Lequel des deux est le conspirateur? Lequel sera le maître et pourra faire grâce à l'autre? En vérité, je n'en sais plus rien. la tête m'a tourné, et je ne sais plus ce que je suis ni ce que je veux: je t'aimais toi mais tu es le seul de ta caste arrogante que j'aie jamais pu souffrir Dans ce moment quoique vainqueur, je suis hors de combat, et, dans un sens poétique, je suis vaincu et contraint à brûler de plus de feux que je n'en allumai. (VIII, 421)

Perdu dans sa tirade, Laurent fait un amalgame de différentes pièces théâtrales. Il cite et Corneille et Racine, mais mélange aussi et la littérature et sa propre réalité puisque pour parler de cette dernière, il fait appel au langage théâtral des deux auteurs classiques.

Cette confusion l'amène à réaliser qu'il est en train de perdre un sens de l'identité qu'il avait gagné au début de la Révolution et donc le sens de son action politique. "Je ne sais plus ce que je suis ni ce que je veux." Laurent alors littéralement confond les citations qu'il déclame; et le vers du Cinna de Corneille (acte V, scène III, vers 1701) où Auguste

exhorte Cinna par ces mots: " Soyons amis. Cinna, c'est moi qui t'en convie." devient dans la bouche de Laurent : "soyons amis Cinna c'est moi qui t'en conjure."

L'invitation à l'amitié que proposait l'Auguste de Corneille à Cinna avec le verbe "convier" et qui montrait une certaine convention littéraire qui véhicule la noblesse des personnages se transforme chez Charrière par une demande suppliante donc plus dramatique d'Auguste à Cinna avec l'utilisation du verbe "conjurer." Plus tard, c'est un vers d' Andromaque de Racine (acte I, scène IV) que Laurent déforme. Dans Andromaque, la réalisation de Pyrrhus de son amour pour Andromaque: "Vaincu, chargé de fers, de regrets, consumé, brûlé de plus de feux que je n'en allumai" devient dans la bouche de Laurent: "je suis vaincu et contraint à brûler de plus de feux que je n'en allumai." De la constatation fataliste de l'amour de Pyrrhus pour Andromaque, Laurent en fait une nécessité par l'utilisation de l'adjectif adverbial "contraint." On peut voir dans cette manipulation du littéraire par Laurent une distance que l'on peut caractériser d'ironique. Le "moi" de Laurent ne sert pas de simple référence à un discours soit littéraire soit politique, il marque un écart entre le fonctionnement de la parole et l'image de la personne. Le moi est une variable que l'écriture de Charrière valorise et qui sous la forme d'une conscience jugeante dénonce les discours sur le mode de l'ironie. Le roman de Charrière n'est donc pas une simple dénonciation du discours politique à travers un jeu de citations. A l'ironie "classique" qui consistait à dénoncer certains abus se substitue ce que Deleuze caractérise d'ironie romantique.¹¹⁶ Cette dernière oppose un état dérisoire et chaotique du soi au chaos multiplié de la

¹¹⁶Gilles Deleuze. La logique du sens (Paris: Collection critique, 1971).

Revolution puisque les personnages en perte de leur langage de classe et de culture ont besoin d'emprunter la langue littéraire pour parler de leurs sentiments mais c'est une langue et surtout un savoir qu'ils déforment. Les personnages ne se contentent pas de signaler la présence de métaphores ou de figures dans le langage politique ou sentimental. Quand ils parlent de leurs choix politiques ou de leurs sentiments, ils le font sur le mode direct de la citation littéraire. Ils créent ainsi non seulement une mise-en-garde sur la conventionalité du langage politique et sentimental mais la jouent ironiquement dans leurs citations. Plus tard, c'est au tour d'Alphonse, l'aristocrate de s'emparer d'une citation du Bérénice de Racine: (acte I, scène IV, vers 234) "Dans l'Orient désert quel devint mon ennui" devient "dans l'Occident désert quel serait mon ennui" (VIII. 460). L'ironie, vue par Charrière se démarque à la fois d'un modèle universalisant puisque le langage fait défaut et d'une origine existentielle puisque les personnages ne manipulent pas correctement leur savoir. L'ironie simule la fausse image d'un modèle universalisant mais en tentant de se constituer en représentation autonome. L'ironie met au jour la crise historique dont les personnages sont témoins et cette ironie devient déchirante, comme le souligne Laurent: "la tête m'a tourné, et je ne sais plus ce que je suis ni ce que je veux." L'ensemble de l'exposé de Laurent est ironique puisque il y a interruption soudaine de récit, "fêlures" de dialogue entre son utilisation du littéraire et sa volonté de dialogue avec Alphonse. Laurent est à la fois victime et agent de ses déchirures. L'ironie fonctionne donc comme un double franchissement de toute valeur de vérité, et peut être considérée comme autre chose qu'une simple procédure de langage puisque Laurent refuse d'adhérer à une identité

politique ou sentimentale "commune." Laurent souligne donc le paradoxe d'un engagement personnel qui s'avère instable et se perd dans la multiplicité des images du langage littéraire. Cependant, c'est à travers son rapport à Pauline dont il est amoureux et à travers sa relation à Alphonse qui reste son ami en ces temps de division. Qu'il se construira une identité. C'est donc, l'amour et l'amitié qui servent de lieux de réflexion pour Laurent : "Voilà, cher Alphonse, quels sont mes rêves politiques depuis que l'amour et la pitié ont adouci mon coeur" (VIII, 432). Cette phrase rappelle Les Lettres écrites de Lausanne, dans lequel la mère dit de sa fille: " Je l'aime uniquement, cela rend bien clairvoyante et bien attentive" (VIII, 148). L'ironie qui attente à la pureté des concepts que véhicule l'écriture et sur laquelle se fondent des opinions, laisse donc apparaître les événements dans leur "réalité:" par exemple la rencontre entre Pauline et Laurent. Charrière développe donc son opposition à l'idéologie politique ambiante au profit d'une description de la singularité de personnages qui se posent les questions suivantes: "Que puis-je?" "Que veux-je?" Chez Charrière l'ironie ne se fige pas dans un programme qui fait du personnage qui écrit la représentation du fonctionnement de la raison. Le moi reste chaotique dans ses incertitudes et ne peut donc devenir exemplaire, ni être sujet ou support d'une idéologie. L'ironie crée un recul à la fois du côté du subjectif et de la pseudo-rationalité du discours politique qui devient chez Laurent un mélange de rêves chaotiques qui s'emparent de récits mythiques, de discours politiques, et de fictions:

Je voudrais qu'une certaine tête pût être promenée sur l'entière surface du globe, ou du moins de l'Europe, ou tout au moins des pays habités par les Français ... Une tête! Ah! Ne frémis pas, cher Alphonse, ne pense pas que j'aie aucune pensée cruelle, ne me crois pas devenu un monstre sanguinaire. Non, je te le jure

... La tête que je voudrais promener, c'est celle de la Méduse; je voudrais qu'elle arrêât tous les coups, tous les cris; je voudrais que le bras levé pour frapper, restât partout immobile, que la bouche ouverte pour maudire, restât muette; et que les Français conservant pour faculté unique celle de penser, fût forcé d'en faire longtemps usage, sans autre objet de ses pensées que ces deux seules questions: Que puis-je? Que veux-je? ... La tête de méduse en donnerait au plus enragés, quand ils auraient bien comparé ce qu'ils veulent et ce qu'ils peuvent, beaucoup d'entre eux rentreraient chez eux ... La tête de méduse ne doit changer rien à leurs courageuses intentions; mais elle les mettra à même de les réaliser ... Avez-vous remarqué mon cher Alphonse qu'il est une classe de gens dont je n'ai pas parlé? La tête de méduse ne pourrait rien sur eux, car ils semblent en être nés frappés: ce sont les poltrons et les égoïstes, qui n'ont pas même un esprit de corps pour les animer et leur tenir lieu d'un autre esprit; ils me rappellent Rome assiégée, et les vieux sénateurs invalides, qui moins tremblants qu'eux attendaient sans se mouvoir, les Gaulois et la mort. Si ces gens-là, au lieu d'être médusés, pouvaient être rappelés au mouvement ... se joindraient aux braves républicains, qui alors de gré ou de force triompheraient de tous ceux que la réflexion n'auraient pu ramener (VIII, 431/432)

Laurent veut "méduser" ces idéologies dans lesquelles les personnes se fondent et qui en leur donnant une identité politique les poussent à l'action révolutionnaire ou contre-révolutionnaire sans tenter de réfléchir aux mots d'ordre édictés. En opposition à cette politique qui ne se vit que dans l'action, Laurent en appelle à une "action" qui ne serait que réflexion. Paralysés par la "tête de méduse," seule la tête, c'est-à-dire le cerveau resterait actif. Même si Laurent tient à "méduser" tous les "enragés," sa "tête de méduse" avertit indirectement le lecteur qu'il porte à son tour une attention particulière à l'intention de l'écrivain, i.e. de prendre une distance plus grande par rapport à la signification donnée aux événements par les personnages. Il n'y a donc pas de possibilité de trouver dans cette histoire en devenir une vérité à accaparer, mais une mise-en-garde contre les discours qui deviennent actions. Si Charrière critique le discours révolutionnaire, elle n'épargne pas moins le discours de la noblesse:

Avec tout cela, il m'est impossible de trouver fort à redire aux révolutions. Toutes les fois qu'on s'en formalisera, que l'on criera à tue-tête en faveur des puissances, des légales autorités, songeons au gros Roi, et à celles qui le gouvernement. Je crois que le monde est fait pour aller toujours mais de travers, c'est un boiteux robuste qui boite tantôt à droite, tantôt à gauche ... l'idée m'est venue d'une caricature où l'on verrait d'un côté trois ou quatre boiteux coiffés l'un d'une mitre, l'autre d'une couronne, et avec cette inscription : gouverneurs despotiques; ils boiteraient à gauche; une béquille les soutiendraient de ce côté là: vis-à-vis d'eux trois ou quatre boiteux boiteraient à droite ayant leurs béquille comme les premiers avec cette inscription: Etats républicains. Au dessous on lirait: Le monde ira boitant de siècle en siècle. (IV, 161)

Le père de Germaine issue de la noblesse ne profère que des platitudes figées dans des conceptions qui relèvent dans le cas du père de Germaine de nombreux récits héroïques :

Il me semble que vous êtes ... un fort bon homme; mais pas du tout un bon français, un digne descendant de vos nobles ancêtres ... Sachez, Monsieur l'abbé que tant qu'il restera un seul brave gentilhomme français qui veuille combattre pour la Royauté, la noblesse et la foi, il trouvera en moi un frère d'armes, un second, un ami, que nul danger n'étonnera, que nul fatigue ne lassera. (VIII, 436)

Le père de Germaine considère son groupe social, la noblesse comme unique et homogène et pour laquelle il s'agit de se battre. La classe noble dans le discours du Marquis est donc qualifiée par une certaine homogénéité et une uniformité à la fois temporelle et spatiale. Mais la Révolution rompt ce modèle d'organisation qui s'oriente à l'intérieur d'un espace défini métaphoriquement comme une classe dont les privilèges sont revendiqués au nom de la "dignité" "la noblesse" "la bravoure." Ces modèles ne sont en fait que l'idée nostalgique d'un ensemble d'attributs uniques qui relève de discours fictifs sur la noblesse. Et cette fois c'est l'aristocrate Alphonse qui se charge de dénoncer cette situation:

N'est-il pas désolant de voir ces malheureux français se compromettre dans l'esprit des étrangers par leur frivolité, leurs indiscretions, leur méchant commérage! On va les croire incorrigibles; et qui est-ce qui pleurera sur des gens à qui l'infortune ne donne pas un instant de circonspection, sur cette noblesse qui exigeant qu'on la respecte, se montre sans dignité, sans générosité, sans rien de ce qui pourrait la rendre respectable! Entre eux les individus se déchirent, se vilipendent, et puis ils prétendent qu'en masse ils doivent être honorés. Qu'est-ce donc que cette dignité d'un corps qui ne se compose pas de la dignité de ses membres? Et si moi, gentilhomme, je ne respecte pas en vous un gentilhomme, comment puis-je espérer que ce titre nous obtienne des égards de qui que ce soit? (VIII. 435)

Dans cette harangue, Alphonse remarque qu'il y a une opposition entre une image solide et idéale de la noblesse comme corps et la singularité banale et mesquine de ses membres.

Comme le montre ces différents passages, l'histoire du côté contrerévolutionnaire est au service de l'idéologie mais d'une idéologie qui a pris sa forme dans le discours fictionnel. Ces discours fictionnels investissent de leurs mots et de leurs représentations le récit des personnages, sans qu'ils arrivent à donner à l'histoire dans le cadre qui leur est fourni, des représentations propres à son objet. Réduite au rôle d'écho de la fiction, ce que l'ironie révèle de l'identité de classe, c'est qu'elle répète inlassablement, sans médiation, ce qui prend forme en dehors d'elle, et souvent même dans un discours fictionnel. Charrière essaie de démontrer que l'établissement d'une Histoire nouvelle ne peut donc se passer que sur le mode d'une réflexion:

Raisonnez ... non, ce n'est pas celà et n'en a même pas l'apparence. Raisonner même de travers demande une certaine patience et une certaine application, au lieu qu'en trois minutes on peut crier, gémir, maudire, puis rire ou en faire semblant et toujours de manière à dérouter tout raisonnement et à décourager tout raisonneur. (VIII, 423)

Les personnages se mettent à réfléchir à la possibilité de créer une société à partir de leur vie bouleversée et de leurs rencontres présentes. c'est-à-dire dans ce que leur situation a d'unique. au lieu de penser à la formation d'une société à partir de modèles pré-établis. Laurent, le jacobin, se rend compte qu'il peut vivre avec des aristocrates. tandis que Germaine, l'aristocrate ne supporte plus son milieu.

Dès sa première lettre, Germaine s'oppose à son père. Si avant la Révolution son père a forcé Alphonse destiné à une autre femme, à épouser Germaine, sa fille, avec la Révolution il le dénonce comme traître, le renie comme fils et interdit à Germaine de communiquer avec lui:

Le seul motif qu'il allègue de son changement de conduite à votre égard, c'est que vous ne montrez pas les sentiments d'un gentilhomme, que vous démentez votre nom, que vous n'êtes pas ce que mon époux, ce que son gendre doit être. J'aurais frémi, j'aurais cru que vous vous étiez rendu coupable de quelque action basse ou méchante, si je n'avais connu la signification et la valeur actuelle de tous ces mots. Vous demeurez à ... et n'êtes point à l'armée de Condé et ne cherchez pas à vous mettre dans le corps de M. de la Châtre ; et vous n'êtes pas non plus en Vendée : voilà ce dont mon père vous blâme, et moi qui vous en louerais bien plutôt, je ne veux plus imiter sa conduite, ne partageant pas ses sentiments . . . (VIII, 417)

Germaine l'aristocrate émigrée annonce sa désolidarisation et de l'ordre ancien représenté par son père et du monde aristocrate dans lequel elle se trouve en Angleterre. Dans cette lettre, Germaine raconte sa vie d'émigrante et insiste sur les détails de sa vie en Angleterre qu'elle qualifie d'une suite d' "ennuis" et de "sottises." Dans ce milieu deux personnes trouvent grâce à ses yeux, l' une est la couturière avec laquelle " one ne peut pas se brouiller tant elle est nécessaire," Et l'autre est la "pauvre Victoire"sa

femme de chambre et "vraiment le seul être raisonnable à qui je puisse parler." et qui a des tendances jacobines. Le "je" de Germaine qui avait un sens dans un certain ordre établi tel l'ordre familial et monarchique n'en a plus mais ce non-sens est lui-même impliqué dans l'impossibilité de déterminer une appartenance de classe qu'elle qu'elle soit. La révolution a destabilisé ce "je" qui devient celui de l'émigrée et dont Germaine se moque. L'utilisation que fait Germaine de l'ironie similaire à celle de Laurent mais de manière moins tragique, implique une distance vis-à-vis d'elle-même qui lui permet de s'observer comme une personne étrangère à tout ce spectacle. Quand Germaine rend compte des scènes quotidiennes de la vie anglaise, cette double présence à elle-même permet alors de "théâtraliser" ce qui se passe en Angleterre. Et à cet effet de théâtralisation correspond un effet de distanciation.

Eparpillée aux quatre coins de l'Europe, la noblesse essaie de reconstruire, indépendamment des circonstances dans lesquelles ses membres se retrouvent, la même communauté que celle de Versailles avec les mêmes attentes, sans égard pour leur nouvelle situation, ni pour celle qu'ils ont quittée. Les émigrés français en Angleterre se contentent de se penser comme nobles, et de reproduire les attitudes qu'ils gardent dans leur mémoire du temps de Versailles. Ils se règlent donc sur un mode de vie nostalgique qui consiste à faire durer le spectacle qui existait du temps de Versailles, à la cour royale. Mais le principal spectateur de cette performance des nobles, qui en était aussi le metteur en scène et le principal acteur, est mort décapité. Si le monde de l'émigration continue à vivre sur le mode de l'apparence, il y a cependant changement du principal acteur : du roi, on passe à la couturière et du registre du pouvoir royal, on passe à celui

de la couture:

Malgré notre infortune, la Mantua Maker, c'est-à-dire la couturière en robes de la Duchesse, joue un si grand rôle chez nous, c'est un personnage si important, si précieux, il est si rare que nous passions deux jours de suite sans la voir, qu'on ne peut mieux choisir un bureau d'adresse . . . On ne peut se brouiller avec une personne si nécessaire. (VIII: 418)

Si l'attitude des émigrés français en Angleterre consiste à se figer dans ce qu'ils imaginent devoir être leur rôle, ils ne le font que comme pauvres copies de ce qu'ils étaient sous la monarchie. Ce mode de vie n'est que spectral puisque le pouvoir monarchique qui permettait d'entretenir ce spectacle a été aboli. Ce que Germaine note c'est qu'en fait l'identité des nobles consiste principalement à imiter et à reproduire par des mouvements presque mécaniques et programmés les gestes de cour. Germaine dénonce l'irresponsabilité des émigrés, leur inconscience et détachement par rapport aux événements qui se déroulent en France. Soulignant cette distance qu'elle ressent par rapport aux émigrés, Germaine déclare d'elle-même: "La poupée habillée, on l'a fait descendre et se mettre à table. Il y avait beaucoup de monde; chacun était placé, et la Duchesse m'avait réservé une place entre elle et Mylord O'Battle que je n'avais pas revu depuis la confidence qu'on s'avisait de lui faire" (VIII, 447). Ce que Germaine souligne c'est qu'ayant perdu la source de leur identité (le pouvoir royal) , les nobles ne sont plus que l'idée de la noblesse et on pourrait même ajouter que "stylisés à l'extrême," il n'en reste que des formes qui s'agrippent de manière désespérée à "recréer leur société" en Angleterre. Leur gestuelle et leurs parures ne sont donc que des emblèmes nominaux permettant de ne faire respecter la hiérarchie que parmi eux. Même leurs biens et leurs possessions laissés en France, valeurs de leur identité n'existent que

de nom puisqu'elles ont été saisies par les Révolutionnaires. Elles ne peuvent plus garantir l'identité de la noblesse car elles ne peuvent plus devenir objets à transaction. Cet aspect de la perte complète de leur monde est renforcé quand dans les bouches aristocratiques de la gentry anglaise, le nom même de ces propriétés est déformé puisque les mots de la langue française pour les anglais ne sont qu'un effet linguistique et ne se réfèrent à rien de concret:

La Duchesse: J'ai reçu des lettres, il y a des décrets affreux, il se passe des choses criantes; on dénonce, on arrête, on massacre : c'en est fait de toute justice, de l'honnêteté et du goût ! Figurez-vous qu'on vient de vendre pour rien, vous dis-je, des porcelaines que j'avais, des porcelaines superbes, des meubles charmants; entre autres il y avait une table de Boule, unique en son espèce. Mylord. Qu'est ce que du boule, Madame la Duchesse; est-ce la même chose que du bouleau, et fait-on de ce bois des tables? (VIII, 425)

D'une part la Révolution conduit à une dissolution de l'ordre qui régnait auparavant, mais n'en établit pas pour autant un nouveau et d'autre part les nobles émigrés conservent de manière obstinée les réflexes et les habitudes d'une période révolue. Alors les personnages de Charrière, isolés du milieu auquel ils appartiennent, prennent le devant de la scène où ils exposent non pas leurs expériences de vie mais les réflexions que ces expériences provoquent. S'éloignant alors d'un monde moral figé, les personnages soulèvent la question de leur vie en commun. En effet les lettres de Germaine "réfléchissent" sa relation à la fois aux émigrés de Londres et à Alphonse; celles de Laurent sa relation aux Républicains et aux gens du château, celles d'Alphonse à son précepteur et à Germaine et celles de Des Fossés aux libertins français de Londres et à Lady Caroline. L'enjeu de Lettres trouvés dans les portefeuilles d'émigrés est donc de poser la question fondamentale d'une possibilité de vivre en commun bien que tous

les personnages sont issus de partis opposés. Plus que la recherche d'une identité et/ou d'une nouvelle vision sociale, c'est la possibilité même d'une vie en commun qui est en jeu dans les Lettres. Et, c'est, à travers les relations amoureuses et asymétriques de Pauline et Laurent, de Germaine et Alphonse, de Lady Carolyne et de Des Fossés que Charrière mène une réflexion sur le problème politique. En remettant en question les premiers éléments qui constituent une identité tels que l'appartenance au groupe social, ou l'appartenance à un espace géographique, les narrateurs en viennent à considérer leur identité personnelle par les questions comme : "Que puis-je? Que veux-je?" Dans le récit, les personnages de Charrière sont littéralement et métaphoriquement déracinés, puisqu'ils ne peuvent ni s'adapter, ni se fondre dans les discours respectifs des idéologies qu'ils sont censés défendre. Êtres-amphibies, ils soulignent par ce déracinement continu que la question de l'identité et de l'appartenance sociale est celle qui les relie à eux-mêmes.

Dans cette perspective, les couples que Charrière décrit, s'insurgent donc contre les représentations du "couple" comme figure conventionnelle mythico-littéraire. Dans le récit de Charrière, les amants ne décrivent jamais leur passion et continuellement remettent leur rôle en question. Des Fossés rompant avec l'idéal de la noblesse devient jardinier et espère que l'assiduité à son travail convaincra Lady Caroline qu'il pourra subvenir à leur besoin. Pauline et Laurent parlent de mariage. Ces alliances peuvent être vues comme métaphore du programme politique de Charrière, qui insiste sur un modèle d'inclusion plutôt que d'exclusion. Pauline et Laurent iront jusqu'à, fuir la France, où Pauline risque sa vie, et c'est Laurent au prix de la sienne qui la conduit en lieu sûr, en

Hollande. Contrairement à un récit romanesque traditionnel, ils ne fuient pas la société qui les condamneraient, mais ils soulignent au contraire leur appartenance à cette société. Laurent retournera en Vendée se battre contre les aristocrates, et Pauline se retrouve en Hollande. Le récit s'achève sur la révélation des sentiments de Pauline pour Laurent mais non sur une confirmation de leur future vie en commun: "Comment m'avez-vous appelé me demande-t-elle. Pauline tout court. Ni Madame, ni Mademoiselle. Non, mais vous me feriez plaisir de m'apprendre comment ... vous voulez être appelé dans la Maison. Je suis Mademoiselle, mais j'aimerais mieux qu'on me crût Madame. Pourquoi? Parcequ'il serait inutile de me croire Mademoiselle" (VIII, 482). Cette manière elliptique qu'a Pauline de révéler son attachement à Laurent distrait le lecteur de l'histoire d'amour pour le plonger dans les événements qui les entourent. Quand à la soeur de Pauline, Germaine, sa relation à Alphonse souligne un désir de communication plutôt que de communion: "Il faut vous écrire, cela calmera mon impatience; et n'y eût-il que le chapitre de mes ennuis, j'ai pour longtemps de quoi vous entretenir"(VIII, 423). Et Alphonse de répondre: "Quelle surprise, ma douce amie; quel trésor que ces deux lettres remises à la fois dans mes mains" (VIII, 434). Et quand il s'adresse à Laurent "Que tes lettres mon cher Laurent, m'ont donné de surprise et de plaisir" (VIII, 437). Quand à Des Fossés s'adressant à Germaine: "Encore une lettre, encore une importunité de la part d'un malheureux doublement fugitif. Songez qu'il n'y a plus que vous dans le monde sur l'intérêt de qui j'ose compter"(VIII, 444). En quelque sorte les lettres mettent en oeuvre la possibilité même d'une société puisqu'il s'agit en société principalement pour Charrière de communiquer. Charrière alors innove

quand à la représentation des amants puisque à la tradition des passions amoureuses qui privilégie la communion des amants ou leur déchéance, elle utilise l'amour pour exposer les limites d'un discours littéraire et politique.

Même si elle condamne certains aspects de la Révolution, Charrière n'en souligne pas moins l'impossible retour à un mode de vie qui préexistait celui de la Révolution et qui se leurre dans la récréation factice de son propre milieu. Mais elle ne se contente pas de simplement proposer une image négative du politique en tant que profession de foi. Ces couples qui se forment sont la possibilité même du politique puisqu'à travers eux s'articule un programme de communauté basée sur une réflexion à partir de l'amitié, c'est-à-dire l'inclusion et non sur le modèle des ennemis c'est-à-dire l'exclusion.

Conclusion

Ultimately, Charrière's fictions are representations of judgment. In her works literature becomes the place where a "free play of judgment" can take place since literature accomplishes more than a knowledge of the representations themselves; it also involves the reader in a performative moment implicit in any judgement, a moment when judgement exceeds any pre-existing conventional formula it may have relied upon for its enunciation. Pour conclure laissons le dernier mot à Charrière: "Ne suis-je pas la plus persécutante puriste qui soit au monde?"

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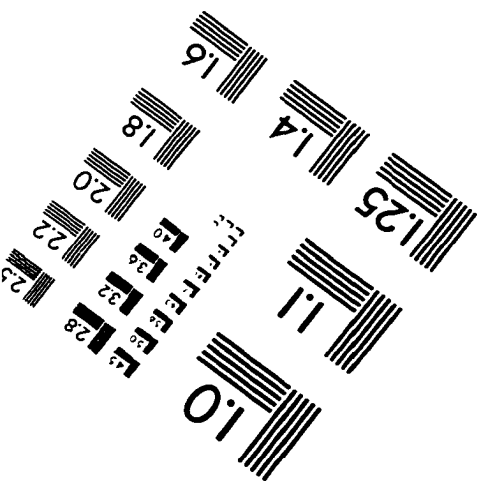
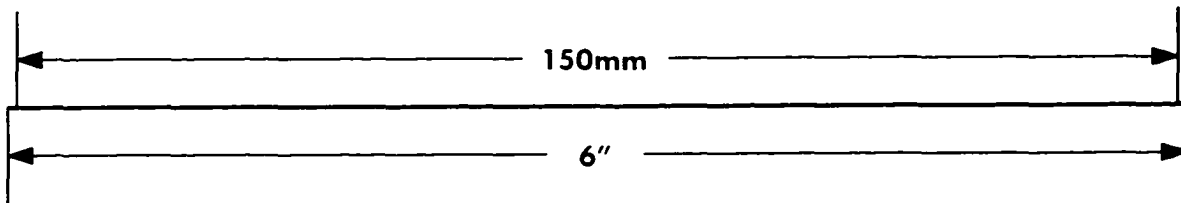
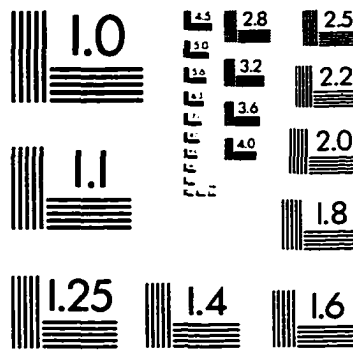
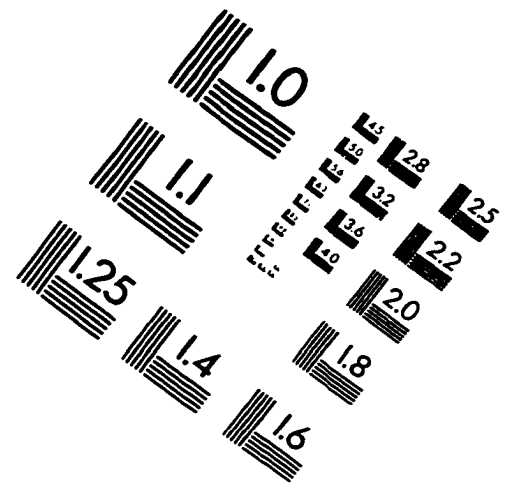
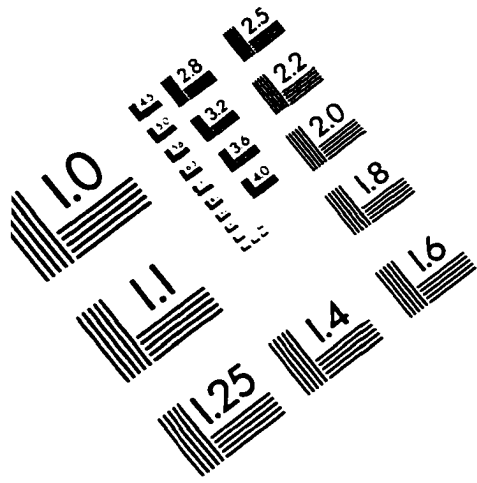
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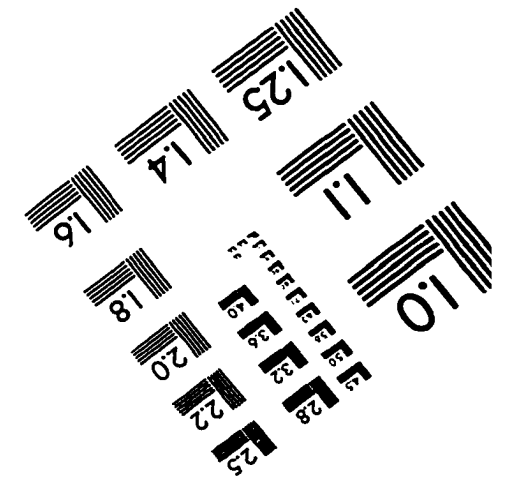
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**The Role of the Hsp90 Chaperone Machine in
Androgen and Estrogen Receptor Action**

by

Albert Edward Fliss Jr.

A dissertation submitted to the Graduate Faculty in Biomedical Sciences in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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Abstract

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by

Albert Edward Fliss Jr.

Adviser: Professor Avrom Caplan

Hsp90 along with its binding proteins or co-chaperones comprises the Hsp90 chaperone machine. This chaperone machine is important in the regulation of steroid hormone receptor activation and is functionally conserved from yeast to mammals. In the present study, the yeast model system was utilized to determine the role of Hsp90 and two of its co-chaperones Ydj1 and Cdc37 in AR and ER hormone binding and subsequent activation. Results from direct hormone binding and ligand competition assays suggest that both Hsp90 and Ydj1 are required for hormone binding to both the AR and ER. In the absence of functional Hsp90, AR and ER were decreased in their ability to bind hormone. Likewise, the ability of hormone antagonist to compete for hormone binding to either receptor was altered. In the absence of Ydj1 or functional Hsp90, the AR antagonist HF was converted from a weak competitor of R1881

binding to a potent one. In contrast, the ER antagonist 4-OHT was converted from a competitor to a potentiator of DES and E2 binding to the ER in the absence of functional Hsp90, whereas, it neither competes nor potentiates DES binding in the absence of Ydj1. The defect in AR hormone binding seen in the $\Delta ydj1$ strain is mediated via the J domain of Ydj1 and Hdj2 was able to fully complement the AR signaling defect.

Previous studies have demonstrated that Cdc37 is also part of the Hsp90 chaperone machine. In this study, it was demonstrated that hormone dependent AR signaling was grossly defective in a Cdc37 mutant strain and this defect was mediated via the HBD. However, in contrast to Hsp90 and Ydj1, the Cdc37 defect was not in hormone binding. This defect was seen to a lesser extent with GR and ER, suggesting that Cdc37 differentially regulates steroid hormone receptor activation.

In summary, Hsp90 and Ydj1 are required for hormone binding to the AR and ER. Cdc37 is differentially required for hormone dependent activation, however, this defect is not in hormone binding. This demonstrates that components of the chaperone machine can act before or after hormone binding.

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I would like to dedicate this thesis to my son, Nicholas. For his birth is truly one of the greatest things that has happened in my life. I thank God for him everyday of my life.

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CHAPTER 1

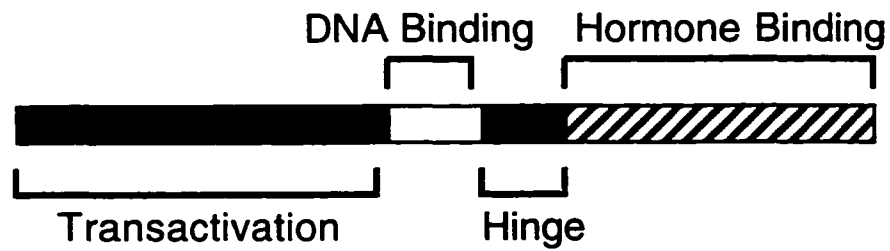
BACKGROUND AND INTRODUCTION

INTRODUCTION

The androgen (**AR**) and estrogen (**ER**) as well as the glucocorticoid (**GR**), progesterone (**PR**) and mineralocorticoid (**MR**) receptors are members of the steroid hormone receptor superfamily (For review, Yamamoto, 1985; Evans, 1988). All of these molecules are intracellular nuclear receptors that become active transcription factors upon hormone binding. All members of the steroid hormone receptor superfamily have structural similarities, each contains a non-conserved amino-terminal transactivation domain which is responsible for interacting with the basal transcriptional machinery in order to modulate target gene expression. There is also a highly conserved DNA binding domain which is responsible for interacting with hormone response elements in the promoter region of target genes. Next to the DNA binding domain is a flexible hinge region. And finally on the carboxy-terminus of the receptor, there is the conserved hormone binding domain (**HBD**) which is the portion of the receptor that binds hormone (Figure 1).

Hormone binding triggers a number of events including the induction of conformational changes which are transmitted to the DNA binding and transactivation domains. The hormone-bound receptor is able to interact with its cognate HRE (hormone response element) and transactivate its target genes. So perhaps the first crucial step in the activation of steroid hormone

Steroid Hormone Receptor Superfamily



Hormone Dependent Activation

1. Hormone binding
2. Transmission of conformational changes
3. Transactivation and DNA binding

Figure 1. Steroid Hormone Receptor Structural Organization and Function

receptors is the binding of hormone at high affinity. Dissociation constants (K_d 's) of the high affinity binding sites of most steroid receptors are typically in the low nanomolar range. Affinity labeling and mutagenesis studies have demonstrated that hormone-receptor interactions occur via the HBD of the ER and the AR (Katzenellenbogen et al, 1993; Wong et al, 1995). Recent crystalization studies have demonstrated that the hormone binding pockets of the thyroid hormone (**THR**) (Wagner et. al., 1995), retinoic acid (Renaud et. al., 1995), ER (Brzozowski et. al., 1997; Tanenbaum et. al., 1998) and PR (Tanenbaum et. al., 1998) are hydrophobic in nature. So in order to attain high affinity binding, the lipophilic hormone must gain access to the hydrophobic binding pocket of the receptor. In order to accomplish this task, conformational alterations or refolding must occur in the HBD. Since it is possible that the hydrophobic pocket might collapse in the absence of hormone. These alterations may in part be facilitated by molecular chaperones.

Molecular chaperones play important roles in both protein folding and signal transduction. Molecular chaperones were defined by Hartl as “proteins that bind to and stabilize an otherwise unstable conformer of another protein, and by controlled binding and release of the substrate protein facilitates its correct fate *in vivo*, be it folding, oligomeric assembly, transport to another subcellular compartment or controlled switching between active and inactive conformations” (Hendrick and Hartl 1993). Of the molecular chaperones only the Hsp90 chaperone machine plays a role in signal transduction (Figure 2).

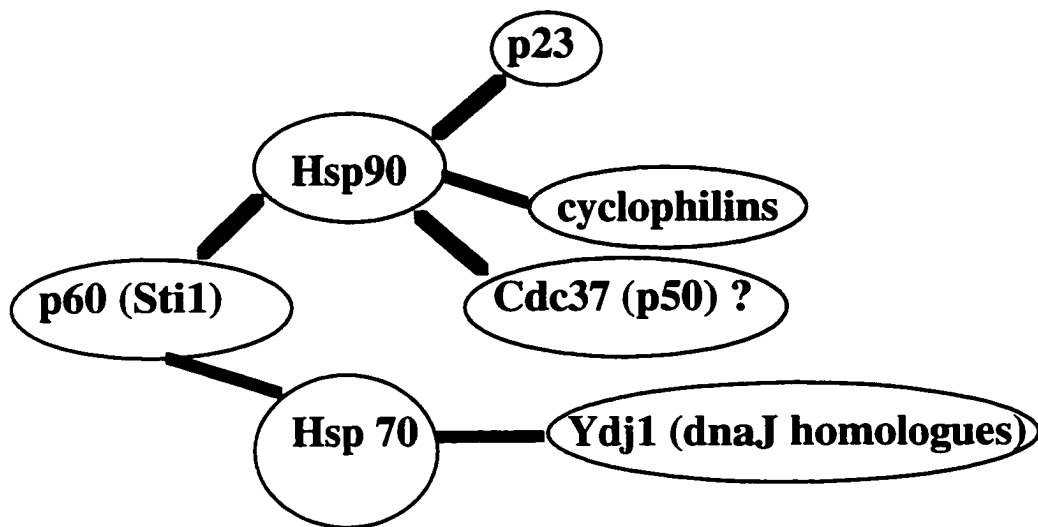


Figure 2. **The Hsp90 Chaperone Machine**

[1] The Hsp90 Chaperone Machine

The Hsp90 chaperone machine is comprised of Hsp90 and its many binding proteins or co-chaperones. Hsp90 is found in the unliganded complexes of the AR (Mariovet et al, 1992; Sullivan et. al., 1985), ER (Redeuilh et al, 1987), PR (Sullivan et. al., 1985; Nemoto et al, 1992; Schuh et al, 1985; Radanyi et al, 1989), GR (Sanchez et al, 1985; Sullivan et. al., 1985), and MR (Rafestin-Oblin et al, 1989). Two molecules of Hsp90 are bound to each aporeceptor complex (Radanyi et al, 1989). In addition to Hsp90, there are several other co-chaperone molecules contained in these aporeceptor complexes, including Hsp70, p60 (Sti1), p48 (Hip), p23 and cyclo/immunophilins (Nair and Smith, 1996; Smith et , 1990 a and b; Smith and Toft, 1992; Johnson and Toft, 1994). These components of the Hsp90 chaperone machine exist in two distinct subcomplexes (Smith, 1993). The first of these complexes is comprised of Hsp90, Hsp70 and p60/Sti1 and is sufficient for hormone binding to the GR *in vitro* (Dittmar and Pratt, 1997). The second of these subcomplexes consists of Hsp90, p23/SBA1 and one of the many cyclo/immunophilins and is thought to stabilize the hormone bound receptor complex (Figure 3) (Johnson et al., 1994; Smith et. al., 1990a; Hutchison et. al., 1994; Hutchison et. al., 1995; Johnson and Toft, 1995). Upon hormone binding, the aporeceptor complex is converted to an active receptor that is capable of binding DNA and transactivating target genes (For review, Evans, 1988). This shift from inactive to active receptor is accompanied by the dissociation of Hsp90 (Kost et al, 1989)

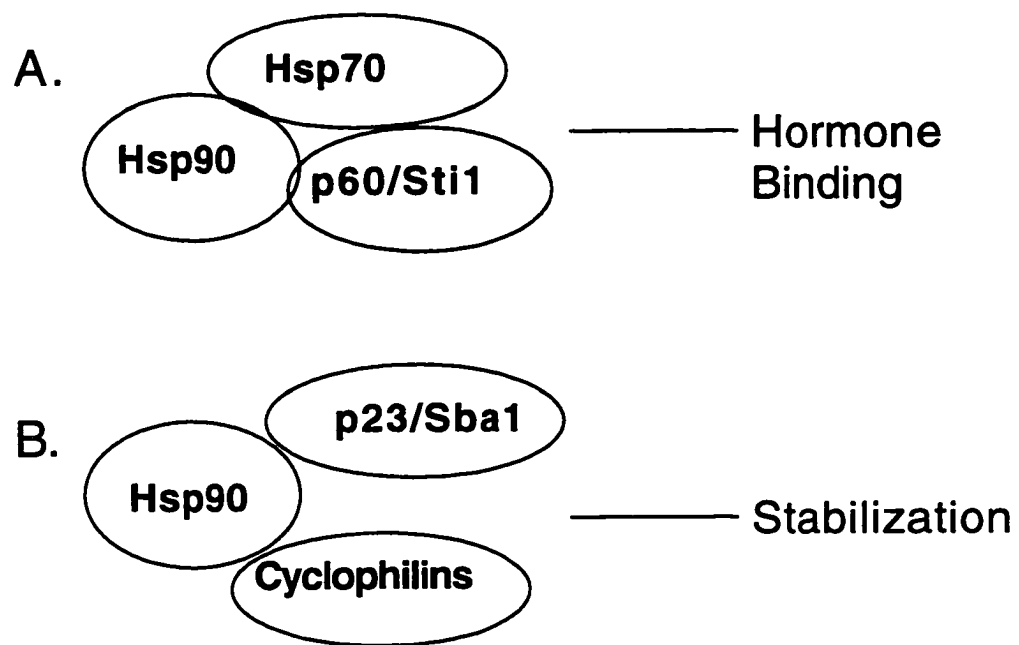


Figure 3. Hsp90 Subcomplexes

[2] Hsp90

Yeast have been extensively used as a model system to study the role of Hsp90 in steroid hormone receptor activation. Hsp90 is an essential for growth in the yeast and is coded for by the *HSP82* and the *HSC82* genes (Borkovich et al., 1989). Of these two genes, *HSC82* is constitutively expressed at high levels, whereas, *HSP82* is heat shock inducible (Finkelstein and Strausberg, 1983; Borkovich et al., 1989). The Hsp90 chaperone machine is functionally conserved from yeast to mammals (Chang and Lindquist, 1994) (Table 1). Mammalian target proteins are able to physically and functionally interact with yeast homologues of mammalian molecular chaperones. Likewise, steroid receptors can function in a hormone dependent manner when introduced into yeast (Picard et al, 1990). Results from *in vivo* studies with yeast strains that are either deficient in Hsp90 or contain temperature sensitive *hsp82* mutants suggest that Hsp90 is required for ER (Picard et al, 1990), GR (Picard et al, 1990; Bohlen and Yamamoto, 1993; Bohlen, 1995; Nathan and Lindquist, 1995), MR (Picard et al, 1990), PR (Bohlen and Yamamoto, 1993), and retinoic acid receptor (**RAR**) (Holley and Yamamoto et al, 1995) activation. Likewise, previous studies have suggested that this decrease in transactivation is at least in part due to a defect in hormone binding. Both *in vitro* and *in vivo* experiments have demonstrated that Hsp90 is required for high affinity hormone binding to the GR (Bresnick et al, 1989; Picard et al, 1990; Bohlen and Yamamoto, 1993; Bohlen, 1995). Since GR was unable to bind hormone at 4°C in the absence or depletion of

TABLE 1: The Hsp90 Chaperone Machine

Component	Mammalian Cell	Yeast Cell Counterpart	Yeast Gene
Hsp90	yes	yes	HSC82/HSP82
Hsp70	yes	yes	SSA1/SSA2/SSA3/SSA4
p60/Hop	yes	yes	STI1
p50	yes	yes	CDC37
p48/Hip	yes	no	---
Cyp-40	yes	yes	CPR 6/CPR 7
dnaJ	yes	yes	YDJ1
p23	yes	yes	Sba1

functional Hsp90 (Bresnick et al, 1989). Likewise, GR was unable to bind hormone when introduced into yeast that contained a temperature sensitive *hsp82* mutant. Similarly, MR also requires Hsp90 for high affinity hormone binding (Schulman et al, 1992).

In contrast to GR and MR, previous studies have suggested that Hsp90 is not needed for high affinity hormone binding to the AR and ER (Binart et al, 1995; Nemoto et al, 1992), implying that Hsp90 is not required for hormone binding to all steroid receptors. The caveat being these experiments were performed at non-physiological temperature under *in vitro* conditions in which molecular chaperone may not normally be required. However, since molecular chaperones themselves are needed to block off-pathway inter and intra-molecular interactions under conditions of high protein concentration and high temperature, this may put into question the physiological relevance of these *in vitro* experiments. In contrast, Segnitz and Gehring recently reported that Hsp90 is required for hormone binding to the ER *in vivo* (Segnitz and Gehring, 1997). In these experiments, ER had a decreased ability to bind hormone when mammalian cells were treated with the Hsp90 inhibitor, geldanamycin (anti-tumor agent), suggesting that Hsp90 is also required for hormone binding to the ER (Segnitz and Gehring, 1997). PR also has a conditional requirement for Hsp90 in hormone binding. PR was unable to bind hormone in the absence of Hsp90 (Smith, 1993) *in vitro* at 37°C, whereas, its binding was recovered at 4°C. This suggests that Hsp90 requirements may be different for each receptor, possibly revealing an inherent difference in

receptor structure. Taken together, these studies strongly suggest that Hsp90 may be essential for high affinity hormone binding to most steroid hormone receptors.

[3] The Role Of Co-Chaperones In Steroid Hormone Receptor Activation

[A] Hsp70

Along with Hsp90 in the chaperone machine exists several co-chaperones or binding proteins. Of these, Hsp70 is one of the co-chaperones that plays an important role in steroid hormone receptor activation. Hsp70 is a well characterized chaperone that is involved in protein folding (For review see Hartl et. al., 1992). During the process of protein folding, Hsp70 molecular chaperones bind and release polypeptides in a reaction cycle that is dependent upon ATP hydrolysis (Gething and Sambrook, 1992). Hsp70 itself exhibits a low level of ATPase activity, but this is augmented by dnaJ (Liberek et al, 1991a) and other J proteins including Ydj1 (Tsai and Douglas, 1996) (the yeast homologue of E. coli dnaJ). Hsp70 in its ATP bound state has a high on and high off rate for interactions with polypeptide substrates, whereas, in its ADP bound state, Hsp70 has a high on and low off rate for interactions with polypeptide substrates (Liberek et al, 1991b). Thus, Hsp70-ADP is able to stably interact with polypeptide substrates.

Hsp70 is present in unliganded steroid hormone receptor complexes (Diehl and Schmidt, 1993; Srinivasan et al, 1994; Ratajczak et al, 1993; Smith et al, 1990b), and is required for the stable association of Hsp90 with steroid hormone receptors in an ATP dependent manner (Hutchison et al, 1994; Smith et. al., 1992). When Hsp70 is depleted *in vitro*, Hsp90-GR complexes are not formed, nor are the receptors converted to their high affinity hormone binding state (Hutchison et al, 1994), suggesting that Hsp70 is required for high affinity hormone binding. Likewise, depletion of Hsp70 with antibody inhibits Hsp90 binding to PR (Smith et. al., 1992).

[B] Ydj1

As mentioned earlier, one of the co-chaperones that plays a crucial role in the Hsp70 reaction cycle is Ydj1p (the yeast homologue of *E. coli* dnaJ) (Caplan et. al., 1991). Ydj1p functions as a molecular chaperone and is able to prevent protein aggregation via a cysteine-rich zinc finger and carboxy-terminal domain (Lu and Cyr, 1998). All J proteins also contain a characteristic amino-terminal J domain (For review see Cheetham and Caplan, 1998). This characteristic J domain along with the glycine and phenylalanine rich region is responsible for J proteins ability to stimulate Hsp70's ATPase activity (Wall et al, 1994). Using the yeast model system, Caplan et al (1995) demonstrated that Ydj1 is required for the *in vivo* activation of AR. Hormone-dependent activation of the AR was decreased in yeast strains containing

either a total deletion or mutation (*ydj1-151-* contains multiple point mutations in all domains except the J domain) of YDJ1. This decrease in hormone dependent transactivation seen in the *ydj1* mutant yeast was mediated via the HBD (Caplan et al, 1995). A similar study demonstrated that a yeast strain containing a *ydj1*^{G315D} (contains a mutation in carboxy-terminal domain of Ydj1p) mutant allele caused derepression of hormone induced ER and GR activation. In these experiments, yeast strains containing the *ydj1*^{G315D} mutant allele had increased levels of hormone independent activity (Kimura et al, 1995). Likewise, *in vitro* studies using a reconstitution system also support the role of Ydj1 in hormone binding to the GR (Dittmar et. al, 1998). In this study, hormone binding to reconstituted GR:Hsp90:p60:Hsp70 was decreased in the absence of Hsp40 and this defect was reversed upon the addition of Ydj1p. Taken together these previous studies suggest a possible dual role for Ydj1 in steroid receptor activation.

[C] p60/Sti1

The process of ADP/ATP nucleotide exchange and subsequent polypeptide release is crucial for the recycling of Hsp70 and is thought to be stimulated by p60(Hop) (Gross et al, 1996a; Gross et al, 1996b). p60 is able to bind to both Hsp70 and Hsp90 and is also present in the aporeceptor complex (Chen et. al., 1996). Sti1 is the yeast homologue of mammalian p60(Hop) (Nicolet and Craig, 1989). In Δ *sti1* yeast, GR are defective in their ability to be activated

upon hormone induction (Chang et al, 1996), while there is a simultaneous increase in the amount of Ydj1 interacting with the GR. These results suggest that Ydj1 plays a role at an earlier stage in the activation pathway of steroid receptors than does Sti1.

[D] p48/HIP and Bag1

In addition to DnaJ homologues and p60/Sti1, the Hsp70 reaction cycle is aided by additional co-chaperones which are also found in association with steroid hormone receptor complexes. These co-chaperones include p48/HIP (Hsp70 Interacting Protein) (Hohfeld et. al., 1995) and Bag1 (Yakayama et. al., 1996). p48/HIP is thought to stabilize the ADP bound state of Hsp70 and may have additional chaperoning functions of its own (Hohfeld et. al., 1995). Recently, Prapapanich et al demonstrated that mutation of the carboxy-terminal region of HIP causes a dose dependent defect in the ability of PR to assemble in a complex with Hsp90, suggesting that HIP is important in receptor signaling (Prapapanich et. al., 1998). Bag1 was initially isolated as an anti-apoptotic protein which was able to bind Bcl-2 (Yakayama et. al., 1996). A Bag1 homologue was later demonstrated in association with activated GR and ER (Zeiner and Ulrich, 1995) and is thought to have GrpE-like activity (Hohfeld and Jentsch, 1997). To date little is known about the specific role of either

p48/HIP or Bag1 in steroid hormone receptor activation other than their association with the Hsp70 reaction cycle.

[E] p23/Sba1

The 23-kDa acidic protein, p23/Sba1, is also present in the aporeceptor complexes of the ER (Ratajczak et al, 1993), PR (Smith and Toft, 1990; Smith et al, 1990a; Smith et. al., 1990b; Johnson et. al., 1994; Johnson and Toft, 1994) , and GR (Hutchison et. al., 1995; Dittmar et al, 1996). Results from experiments performed *in vitro* suggest that p23 is required for hormone binding to the GR and PR (Dittmar et. al., 1997; Hutchison et al, 1995; Johnson and Toft, 1994; Smith et al, 1995; Johnson and Toft, 1991; Hutchison et. al., 1994). Upon depletion of p23, GR are unable to bind hormone at 4°C (Hutchison et al, 1995). Similarly, when the interactions between Hsp90 and p23 are disrupted, hormone binding to PR is abolished (Smith et al, 1995) and there is a concurrent loss of the cyclophilin, CyP40, from the receptor (Johnson et al, 1995). However, *in vivo* yeast studies have failed to reveal any role for p23 in steroid receptor activation (Fang et al., 1998, Bohlen 1998). In these studies, both AR and GR are able to be fully activated by hormone in the absence of p23, suggesting that p23 may not be required *in vivo*.

[F] Cyclophilins

Cyclophilins similar to CyP40 are found in both ER, PR and GR complexes (Hutchison et al, 1993; Smith et. al., 1993a; Smith et. al., 1993b; Johnson and

Toft, 1994). Recent *in vivo* studies have demonstrated that yeast lacking Cpr7, the yeast homologue of CyP-40, show a decrease in hormone dependent GR activation (Duina et al, 1996). Picard (1996) has recently demonstrated that there is no GR transactivation defect when comparing a Δ cpr6 mutant with its isogenic wild type strain (Warth et. al., 1997). This suggests that only Cpr7 plays an important role in receptor signaling *in vivo*.

[G] p50/Cdc37

Although its presence in steroid hormone aporeceptor complexes has not been demonstrated (Nair et al, 1997, Kimura et al., 1997), Cdc37 can physically interact with Hsp90 in the activation of certain kinases including v-src kinase (Brugge, 1986; Dey et al, 1996), CDK4 (Stepanova et al, Dai et al., 1996) and the Sevenless kinase of *Drosophila* (Cutforth and Rubin, 1994). Likewise, Hsp90, Ydj1, Sti1, and Cdc37 are all suppressors of the v-src lethality phenotype in yeast (Kimura et. al., 1995; Nathan and Lindquist, 1995; Dey et. al., 1996a; Dey et. al., 1996b; Chang et. al., 1997). In wild type yeast, the expression of v-src leads to a lethal phenotype due to the inappropriate phosphorylation of many proteins at their tyrosine residues (Florio et. al., 1994). However in yeast that contain a mutation in any of these genes, v-src has decreased kinase activity and the lethal phenotype is suppressed (Xu and Lindquist, 1993; Kimura et. al., 1995; Nathan and Lindquist, 1995; Dey et. al., 1996a; Dey et. al., 1996b; Chang et. al., 1997). This might suggest a role for

p50/Cdc37 in other signaling pathways involving the Hsp90 chaperone machine.

Taken together these previous studies demonstrate that the individual components of the Hsp90 chaperone machine play vital roles in steroid hormone receptor activation. I will now describe in my thesis what role Hsp90, Ydj1 and Cdc37 play in hormone binding and activation of the AR and ER *in vivo*.

CHAPTER II

**CHARACTERIZATION OF THE ROLE OF
HSP90 IN ANDROGEN AND ESTROGEN
RECEPTOR ACTION**

Introduction

Hsp90 plays an important role in the regulation of signal transduction by steroid hormone receptors and protein kinases. In the case of steroid hormone receptors, Hsp90 itself associates with the unliganded forms of the AR (Mariovet et al, 1992; Sullivan et. al., 1985), ER (Redeuilh et al, 1987), GR (Sanchez et al, 1985; Sullivan et. al., 1985), MR (Rafestin-Oblin et al, 1989) and the PR (Nemoto et al, 1992; Schuh et al, 1985; Radanyi et al, 1989; Sullivan et. al., 1985). Although Hsp90 binds to the unliganded forms of all the above mentioned receptors, there is little consensus for Hsp90 function. For example, it has been found from experiments performed *in vitro* that Hsp90 is essential for hormone binding to the GR under all conditions (Bresnick et. al., 1989) , whereas, it is required for high affinity hormone binding to the PR only at 37°C (Smith, 1993). Likewise, Hsp90 appears to be important for the ability of ER to bind hormone with high affinity *in vivo* in animal cells (Segnitz and Gehring, 1997). In this study, treatment of animal cells with geldanamycin (a benzoquinoid ansamycin that directly binds to Hsp90 and inhibits its function) resulted in reduced levels of hormone binding to several receptors including ER (Segnitz and Gehring, 1997). However, previous *in vitro* studies suggest that Hsp90 is not required for hormone binding to the AR or ER (Nemoto et. al., 1992; Binart et. al., 1995). In these studies both the AR and ER were able to bind hormone in the absence of Hsp90. However as explained earlier, these experiments were performed *in vitro* at 4°C with a truncated recombinant

receptor construct. Thus, it appears likely that molecular chaperones modulate the activity of steroid hormone receptors *in vivo*, although they may not be required under certain experimental conditions *in vitro*.

Analysis of the Hsp90 mechanism of action has been largely restricted to studies with the GR and PR. It has been demonstrated that Hsp90 functions via discrete sub-complexes that may bind to the receptors independently of each other. The first Hsp90 sub-complex containing Hsp90/Hsp70/p60 (Sti1p) and p48 (Hip) appears to be important for generating the high affinity hormone binding conformation (Dittmar and Pratt, 1997). Once formed, this conformation is stabilized by another complex that includes Hsp90, one of several cyclo/immunophilins and p23/Sba1 (Johnson et. al., 1994; Smith et. al., 1990a; Hutchison et. al., 1994; Hutchison et. al., 1995; Johnson and Toft, 1991). It has been proposed that receptors continually cycle in and out of the high affinity hormone binding conformation, and in yeast, Nathan and Lindquist showed that Hsp90 was continuously required for hormone dependent activation of GR (Nathan and Lindquist, 1995) .

In the study presented here, the yeast system was used in order to determine the role of Hsp90 in ligand binding to the AR and ER. One may ask why use yeast to study mammalian steroid receptors that are normally not present in yeast? First, the Hsp90 chaperone machine is functionally conserved from yeast to mammals allowing one to determine its role in steroid receptor action in an *in vivo* setting. Second, the genetic malleability of *Saccharomyces cerevisiae* allows one to dissect the role of the individual

components of the chaperone machine in steroid receptor activation. Finally, previous studies have demonstrated that steroid receptor including the AR and ER are able to function in a hormone dependent manner when heterologously introduced into *Saccharomyces cerevisiae*. Our results using the yeast system indicate that Hsp90 operates at a distinct step in generating the high affinity hormone binding state of the AR and ER. Using both hormone binding and ligand competition assays, it was demonstrated that AR and ER are decreased in their ability to bind hormone in the absence of functional Hsp90. In addition, hydroxyflutamide (**HF**) was converted from a weak to a strong competitor of hormone binding to the AR in the absence of functional Hsp90. Interestingly, 4-hydroxytamoxifen (**4-OHT**) was converted from a strong competitor to a strong potentiator of hormone binding to the ER in the absence of functional Hsp90. This suggests that Hsp90 is required for ligand binding to both the AR and the ER.

Results

Previous *in vivo* studies in the yeast system revealed that Hsp90 was required for activation and high affinity hormone binding to the GR (Bohen and Yamamoto, 1993; Bohan, 1995). Studies were therefore initiated to test whether Hsp90 was also required for high affinity hormone binding to the AR and ER. These studies were performed by incubating ³H labeled hormone with wild type or Hsp90 mutant yeast transformed by a plasmid constitutively

expressing either the AR or the ER. Hormone binding was assessed by quantitating of the amount of labeled ligand retained by the cells.

[1] DES Binding to the ER is Defective in an *hsp82* Mutant Strain

To test whether Hsp90 is required for proper hormone binding to the ER, the full length human receptor was constitutively expressed in both the isogenic wild type and an *hsp82* mutant yeast strain. The mutant used in the hormone binding studies contained a single point substitution, glycine to aspartate at position 170, in the *HSP82* gene, and is termed *G170D*. This mutation results in a temperature sensitive growth phenotype where the yeast are viable at the permissive temperature of 25°C and inviable at restrictive temperatures above 33°C (Kimura and Yahara, 1994; Nathan and Lindquist, 1995). This mutant was originally characterized by Nathan and Lindquist to be defective in GR signaling (Nathan and Lindquist, 1995). In order to construct both the wild type and *hsp82* mutant strains used in this study, both the *HSC82* and *HSP82* alleles were disrupted and replaced by a plasmid which constitutively expresses either the wild type or mutant allele (Nathan and Lindquist, 1995). Direct hormone binding assays were performed by incubating growing yeast which were heterologously expressing ER with ³H diethylstilbesterol (**DES**). As shown in Figure 4A, DES binds to a similar extent in both the wild type and *G170D* strains at concentrations ranging from 1-100 nM at the permissive temperature of 25°C and this binding was dependent on the presence of the ER. At the restrictive temperature, however,

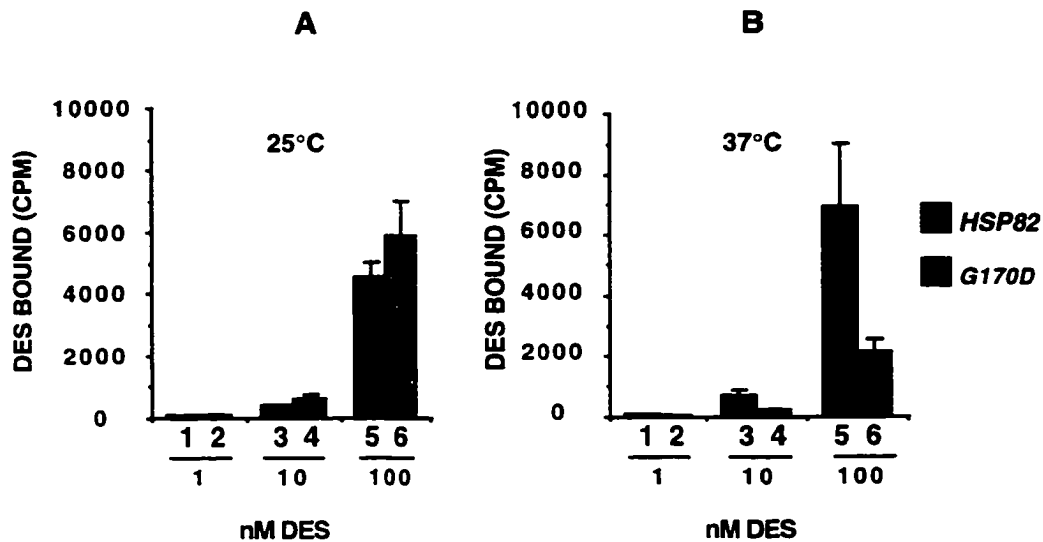


Figure 4. **Hormone binding to ER heterologously expressed in wild type and *hsp82*^{G170D} mutant yeast.** Wild type strain AFY43 (*HSP82*; black bars) and *hsp82*^{G170D} (*G170D*; gray bars) mutant yeast strain AFY44 heterologously expressing ER were incubated at 25°C (A) or 37°C (B) with 1 (lanes 1 and 2), 10 (lanes 3 and 4) and 100 (lanes 5 and 6) nM [³H] DES. Results are expressed as [³H] DES bound (cpm). Results are the mean of at least three independent experiments.

there was a 3-fold decrease in the ability of ER to bind the DES (100 nM) in the *G170D* mutant cells (Figure 4B-lane 5 and 6), even though the wild type and *hsp82* mutant cells contained similar amounts of ER protein (see later, Fig.8). These data indicate that the ER is decreased in its ability to bind DES upon Hsp90 loss of function.

[2] 4-OHT Increases DES Binding to the ER Upon Hsp90 Loss of Function

Previous studies have demonstrated that both hormone and hormone antagonists interact with similar residues in the hydrophobic ligand binding pocket of steroid hormone receptors (Katzenellenbogen et al, 1993; Wong et al, 1995; Brzozowski et. al., 1997), suggesting that there may be a concurrent alteration in the ability of a hormone antagonist to compete for hormone binding. To see if this was the case for the ER, it was tested whether decreased binding of DES to the ER in the *G170D* mutant would manifest itself in any alteration in the ability of the drug 4-OHT to compete for DES binding.

When wild type yeast cells containing the ER were incubated with DES in the presence of increasing concentrations of the competitive inhibitor 4-OHT, there was an expected dose dependent decrease in the level of DES binding, at both 25°C and 37°C (Figure 5A and B-lanes 3, 5, and 7). However, this decrease was not observed when these same experiments were performed with the ER in the *G170D* mutant strain (Figure 5A and B-lanes 4, 6, and 8). In the *G170D* mutant, 4-OHT was unable to compete for DES binding in *G170D*

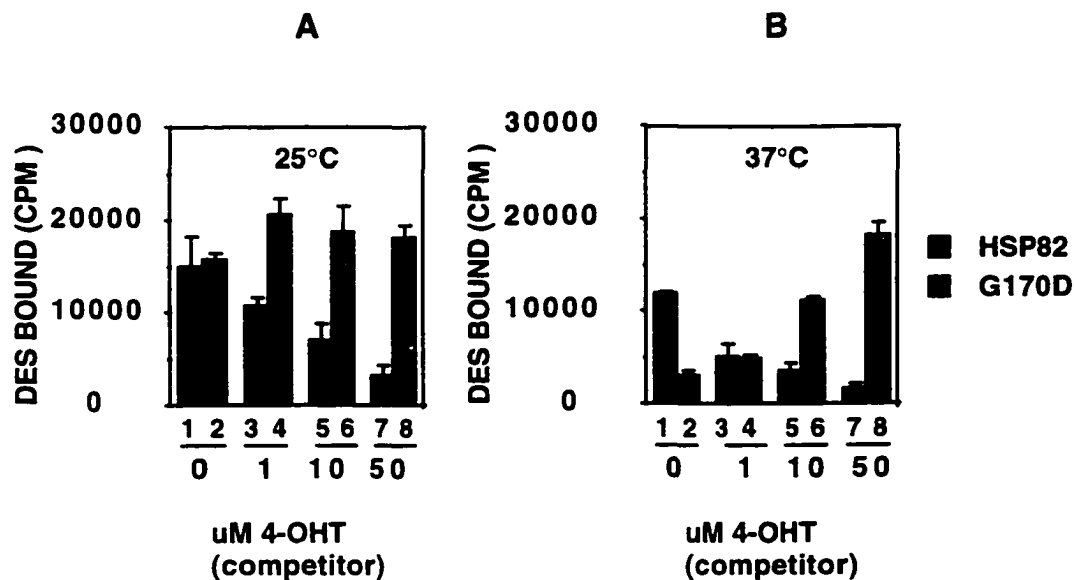


Figure 5. 4-OHT competition assay with DES in wild type and *hsp82^{G170D}* mutant yeast. (A) Wild type strain AFY43 (*HSP82*; black bars; lanes 1,3,5,7) and *hsp82^{G170D}* (*G170D*; gray bars; lanes 2,4,6,8) mutant yeast strain AFY44 heterologously expressing ER were incubated at 25°C with or without varying amounts (1 (lane 3), 10 (lane 5) and 50 (lane 7) μ M) of 4-OHT in the presence of 100 nM [³H] DES. (B) Wild type (WT; gray bars; lanes 1,3,5,7) and *hsp82^{G170D}* (*G170D*; black bars; lanes 2,4,6,8) mutant yeast heterologously expressing ER were incubated at 37°C with or without varying amounts (1 (lane 3), 10 (lane 5) and 50 (lane 7) μ M) of 4-OHT in the presence of 100 nM [³H] DES. Results are expressed as [³H] DES bound (cpm $\times 10^{-2}$). Results are the mean of at least three independent experiments.

at 25°C (Figure 5A-lanes 4, 6, and 8) , whereas, 4-OHT actually increased DES binding (7.5 fold increase) to the ER at 37°C in a dose dependent manner (Figure 5B-lanes 4, 6, and 8). This may indicate that the G170D allele is mutant even at the permissive temperature for some functions of Hsp90. This increase in DES binding in the presence of 4-OHT in the *G170D* mutant was not observed in yeast cells that did not express the ER, indicating that it was dependent upon the presence of the receptor (Figure 6). In order to determine whether this phenotype was specific for the G170D mutant, 4-OHT competition assays were performed on six other *hsp82* mutants. These mutants can be grouped into two categories; 1) temperature sensitive mutants which include *A97I* (Kimura et. al., 1994), *T101I* (Kimura et. al., 1994), *G313N* (Bohen and Yamamoto, 1993), *S485Y* (Kimura et. al., 1994) and *T525I* (Bohen and Yamamoto, 1993), and 2) generalized mutants which are mutant at both temperatures, *E431K* (Bohen and Yamamoto, 1993). Of these mutants, *A97I* and *T101I* fall into the region of Hsp90 that is able to interact with the benzaquinoid ansamycin, geldanamycin (for schematic see Figure 7). The other mutants including *G313N*, *E431K*, *S485Y* and *T525I* are in the region of Hsp90 that is known to interact with steroid hormone receptors. Interestingly, in certain *hsp82* mutants there was very little increase in DES binding at 25°C, but the effect was amplified at 37°C; this group included *G170D* (1.2 fold increase at 25°C (Figure 5A and Figure 8A); 7.5 fold increase at 37°C (Figure 5B and 8B) and *G313N* (1.8 fold increase at 25°C (Figure 8A); 14 fold increase at 37°C) (Figure 8B). All *hsp82* mutants with the exception of *S485Y*

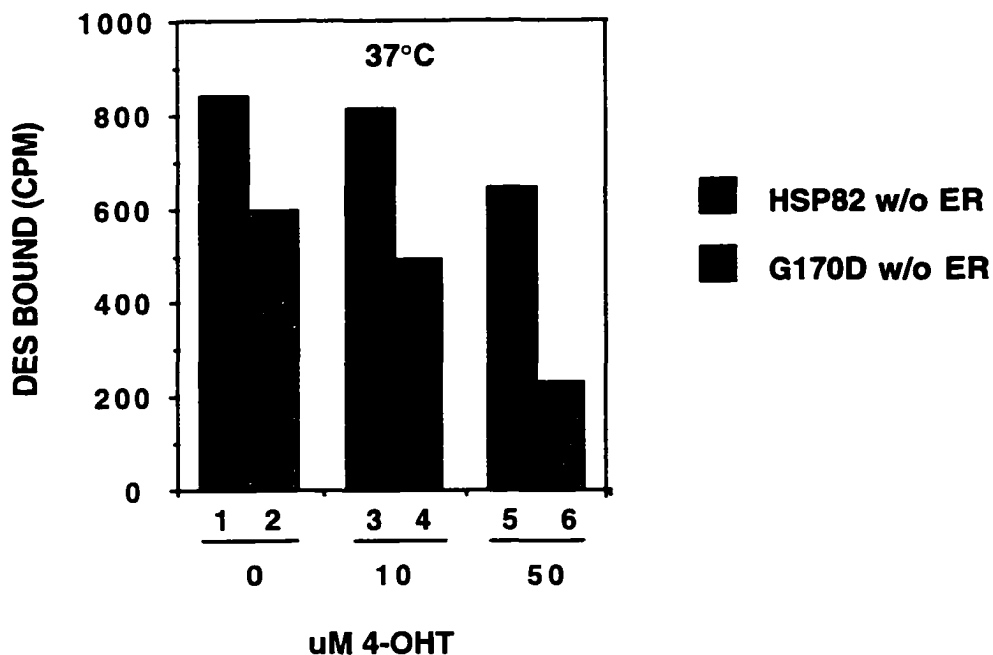


Figure 6.4- OHT competition assay with DES in the absence of ER in wild type and *hsp82^{G170D}* mutant yeast. Wild type strain AFY43 (*HSP82*; black bars; lanes 1,3, and 5) and *hsp82^{G170D}* (*G170D*; gray bars; lanes 2,4 and 6) mutant yeast strain AFY44 (without ER) were incubated at 37°C with varying amounts (0 μ M (lanes 1 and 2), 10 μ M (lanes 3 and 4) and 50 μ M (lanes 5 and 6)) of 4-OHT in the presence of 100 nM [3 H] DES. Results are expressed as [3 H] DES bound (cpm $\times 10^{-2}$).

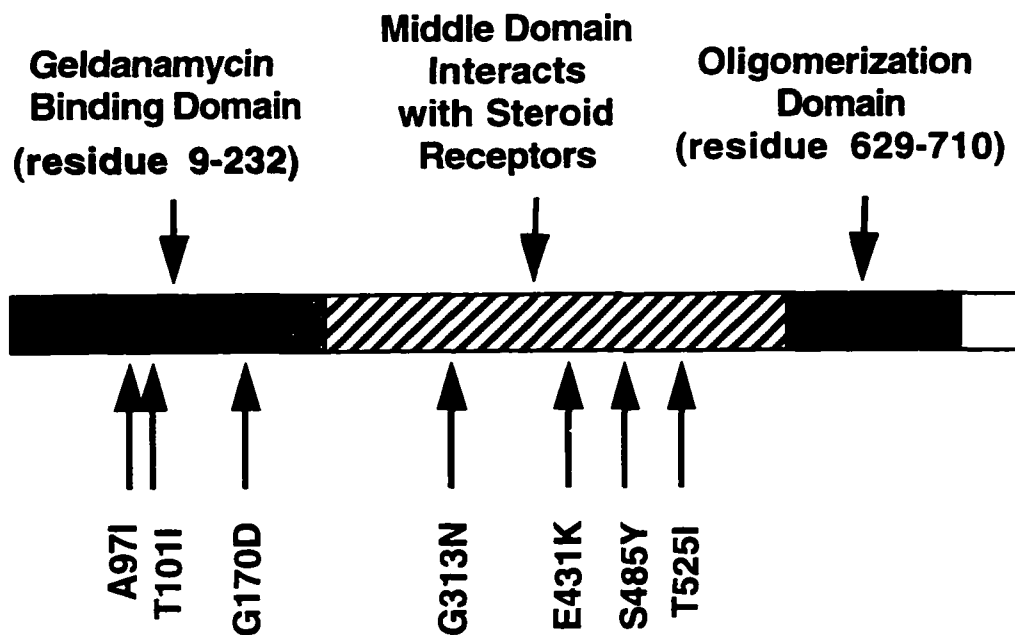


Figure 7. Domain Structure of Hsp90.

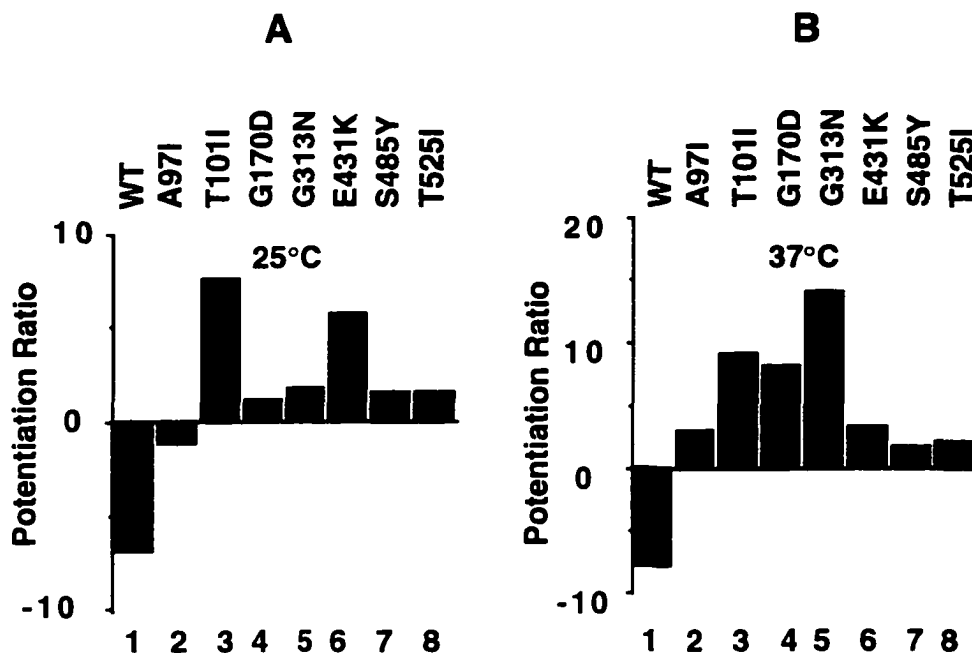


Figure 8. **4-OHT competition assays on various *hsp82* mutants.** (A and B) Wild type strain AFY43 (WT) and *hsp82* mutant (A97I (AFYA97IER), T101I (AFYT101IER), G170D (AFY43), G313N (AFYG313NER), E431K (AFYE431KER), S485Y (AFYS485YER), and T525I (AFYT525IER)) containing yeast heterologously expressing ER were incubated at 25°C (A) or 37°C (B) with and without 50 μ M 4-OHT in the presence of 100 nM [3 H] DES. Results are expressed as Fold Potentiation (cpm [3 H] DES bound in the presence of 4-OHT divided by cpm [3 H] DES bound in the absence of 4-OHT). Results are the mean of three independent experiments.

demonstrated an increase in DES binding upon 4-OHT treatment (Figure 8A and B). In addition to the *G170D* mutant, the *G313N* and the *A97I* mutant were also decreased in their ability to bind DES at both the permissive and non-permissive temperature (Figure 9). All mutants and wild type yeast with the exception of *G313N* also contained similar quantities of Hsp90 protein as demonstrated by Western blot analysis (Figure 10). The level of Hsp90 protein was significantly decreased in the *G313N* mutant when compared to all other mutant and wild type strains tested (Figure 10). Thus, 4-OHT is able to increase binding of DES to the ER to differing extents in 6 different *hsp82* mutants. In order to determine whether the phenotype of the *hsp82* mutant yeast could be complemented with the wild type Hsp90, 4-OHT competition assays were performed on heterozygotes that contain both *HSC82* wild type and an *hsp82* mutant allele. No increase in DES binding upon 4-OHT treatment was seen in any of the heterozygotes tested, they all acted as wild type for 4-OHT competition (Figure 11). When these same heterozygotes were plated on 5-fluoro-orotic acid (**FOA**) (in order to deselect for the wild type *HSP82* plasmid), the mutant 4-OHT phenotype was restored. This indicates that the *hsp82* mutants tested are recessive and can be complemented by wild type *HSP82*. In order to determine whether this phenotype was specific for DES, 4-OHT competition assays were performed with ³H- 17β-estradiol (**E2**), instead of DES. A similar increase in hormone binding upon 4-OHT treatment of the mutant was also observed when E2 was used as a ligand (Figure 12). In this case, however, there was a reduced signal to noise ratio resulting in

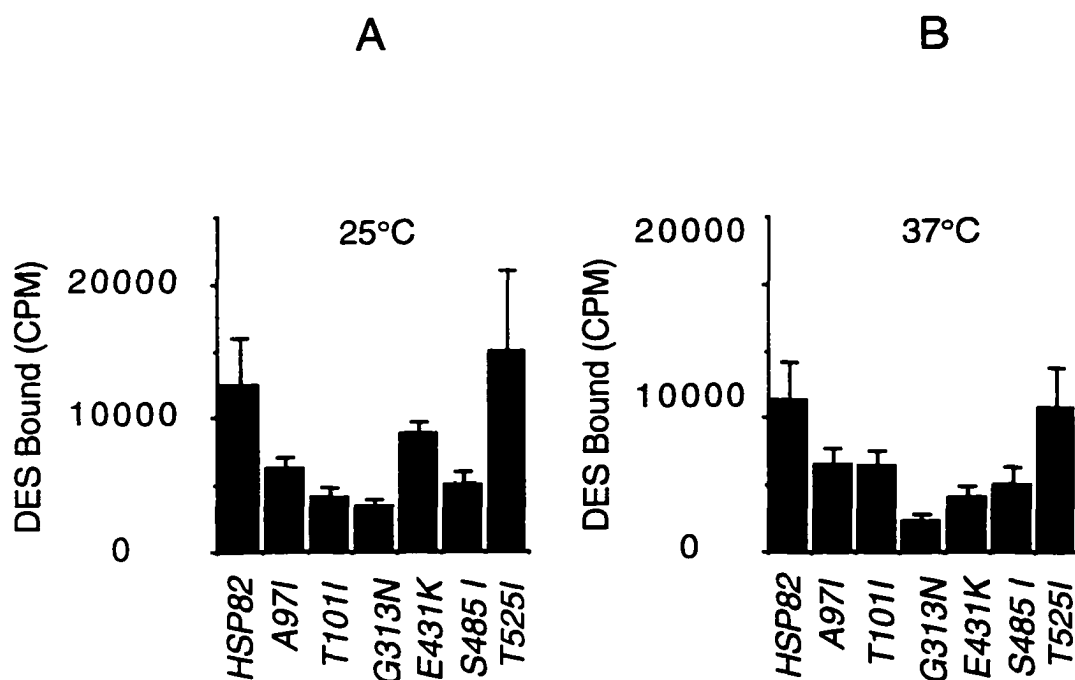


Figure 9. **Hormone binding to ER heterologously expressed in wild type and *hsp82* mutant yeast.** Wild type AFY43 (*HSP82*; lane 1) and AFYA971ER (*A971*, lane 2), AFYT1011ER (*T1011*, lane 3), AFYG313NER (*G313N*, lane 4), AFYE431KER (*E431K*, lane 5), AFYS485YER (*S485Y*, lane 6) and AFYT5251ER (*T525I*, lane 7) mutant yeast heterologously expressing ER were incubated at 25°C (A) or 37°C (B) with 100 nM [³H] DES. Results are expressed as [³H] DES bound (cpm). Results are the mean of at least three independent experiments.

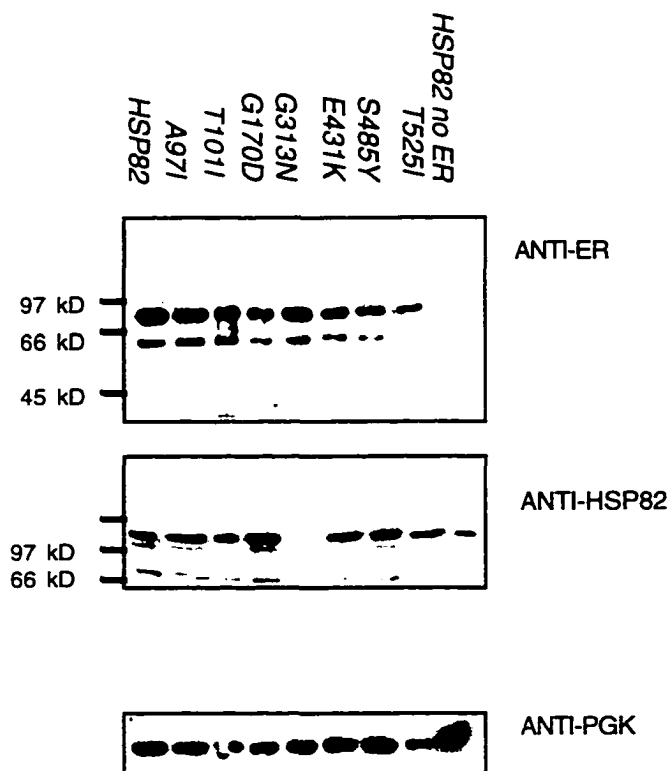


Figure 10. Western blot analysis of ER in wild type and *hsp82* mutant yeast. Western blot analysis of ER (top panel; arrow denotes location of ER and star denotes breakdown product of ER), Hsp90 (middle panel; arrow denotes location of Hsp90). Analysis was performed on whole cell extracts of wild type AFY43 (WT; lane 1), AFYA97IER (*A97I*; lane 2), AFYT101IER (*T101I*; lane 3), AFY44 (*G170D*; lane 4), AFYG313NER (*G313N*; lane 5), AFYE431KER (*E431K*; lane 6), AFYS485YER (*S485Y*; lane 7), AFYT525IER (*T525I*; lane 8) expressing ER and p82a (not expressing ER) (WT - ER; lane 9) yeast strains. Molecular weight standards are shown in kDa. Probing with antisera specific for Phosphoglycerate kinase was used as a loading control (PGK; lower panel; arrow denotes location of PGK).

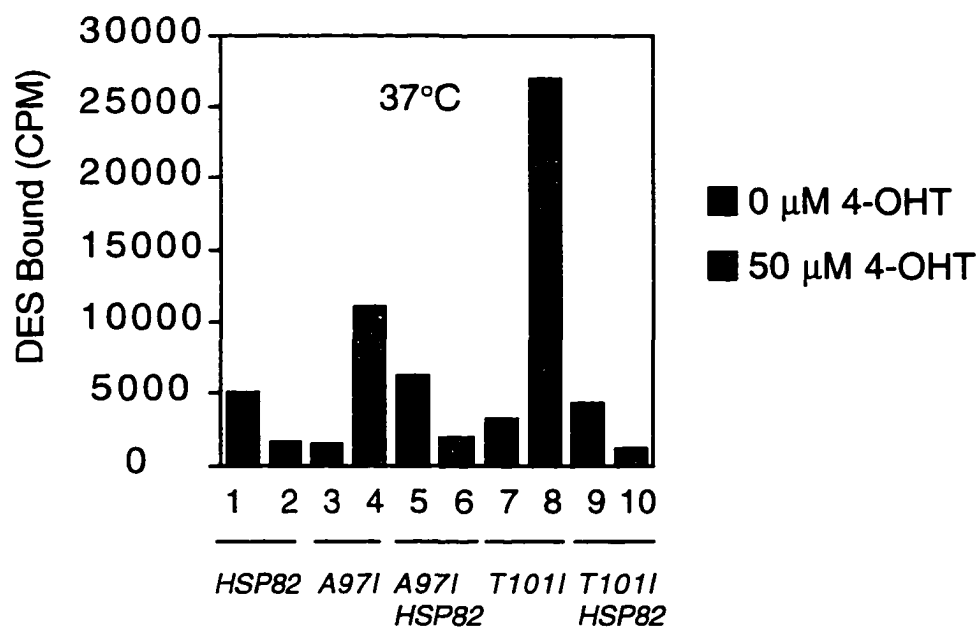


Figure 11. **4- OHT competition assays in a heterozygote *hsp82/HSP82* yeast strains.** Wild type AFY43 (*HSP82*, lanes 1 and 2), AFYA971ER (*A971*, lanes 3 and 4), AFYA971ERHSP82 (*A971/HSP82*, lanes 5 and 6), AFYT1011ER (*T1011*, lanes 7 and 8) and AFYA971ERHSP82 (*T1011/HSP82*, lanes 9 and 10) mutant yeast heterologously expressing ER were incubated at 37°C with (gray bars; lanes 2, 4, 6, 8 and 10) or without (black bars; lanes 1, 3, 5, 7 and 9) 50 μM 4-OHT in the presence of 100 nM [³H] DES. Results are expressed as [³H] DES (cpm).

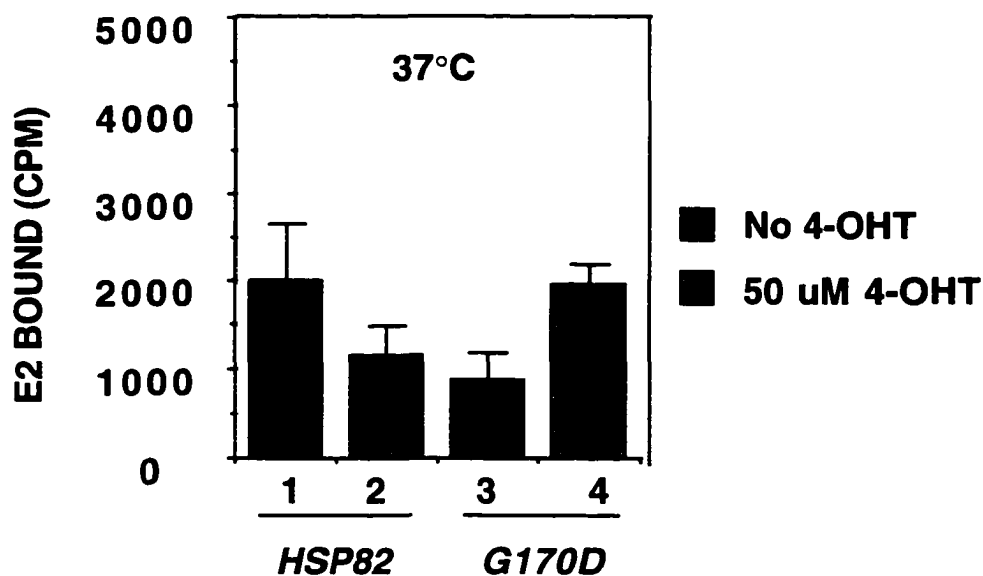


Figure 12. 4-OHT competition assay with E2 in wild type and *hsp82*^{G170D} mutant yeast. Wild type AFY43 (*HSP82*) and AFY44 (*G170D*) mutant yeast heterologously expressing ER were incubated at 37°C with (gray bars; lanes 2 and 4) or without (black bars; lanes 1 and 3) 50 μM 4-OHT in the presence of 100 nM [³H] 17β-estradiol. Results are expressed as [³H] 17β-estradiol bound (cpm).

decreased levels of potentiation at 37°C (2 fold) (Figure 12-lane 4). To further investigate the 4-OHT induced increase in DES binding, the ability of 4-OHT to prevent DES dissociation from the ER in the *G170D* mutant was evaluated. This was performed by a two-step procedure whereby the ³H-DES was incubated with the *G170D* cells in the presence of 4-OHT at both 25°C and 37°C. Subsequently, these cells were washed in media and were then re-incubated at 37°C in media in the presence or absence of 4-OHT. As shown in Fig. 13, cells that were subsequently incubated in media containing 4-OHT retained approximately 40% of the initially bound ³H-DES (lane 2), but only if they were originally labeled at 37°C. If the cells were subsequently incubated in media lacking 4-OHT, the ³H-DES that remained bound to the ER was only 15% of the original value (lane 1). This indicates that 4-OHT is able to prevent bound DES from dissociating. However, if the original binding was at 25°C, then 4-OHT could not prevent DES dissociation (lane 4). These data reflect upon the qualitative difference in the nature of ³H-DES binding to the ER at the permissive and restrictive temperatures in the *G170D* mutant.

As described earlier previous studies have demonstrated that GR (Picard et. al., 1990), ER (Picard et. al., 1990), PR (Bohen and Yamamoto, 1993), AR (Fang et. al., 1996), MR (Picard et. al., 1990) and RAR (Holley and Yamamoto, 1995) are unable to fully transactivate upon hormone binding in the absence of functional Hsp90. Initial experiments were performed to determine if ligand dependent transactivation was also defective in the *G170D* mutant strain. As shown in Figure 14, there was no difference in the ability of

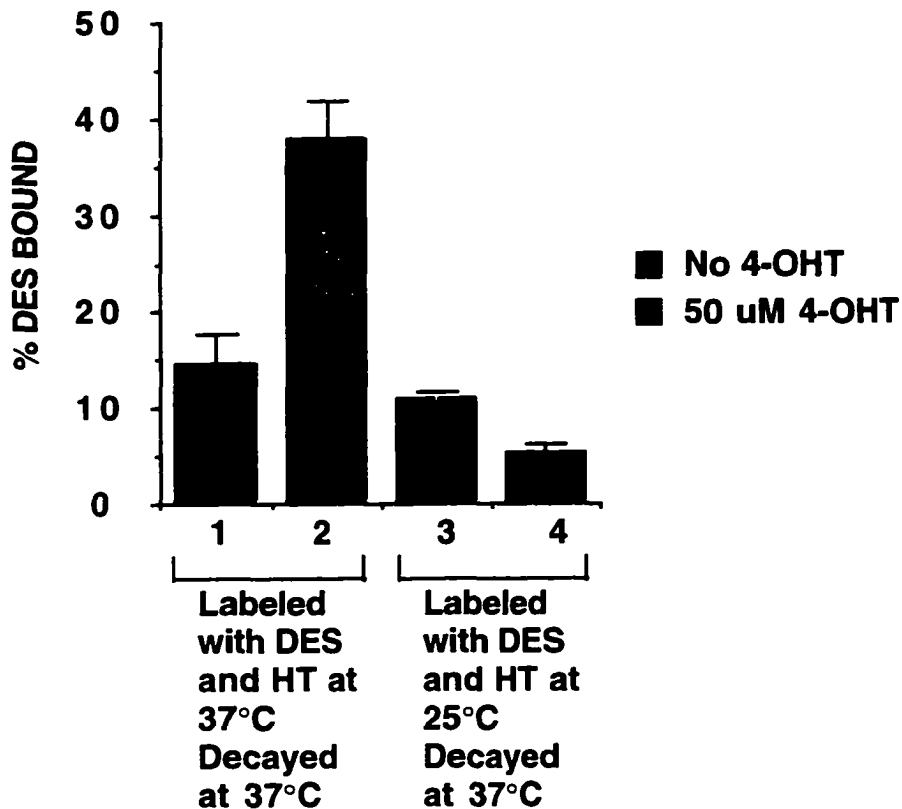


Figure 13. Temperature shift hormone dissociation assay. *hsp82^{G170D}* mutant yeast (AFY44) were incubated at either 25°C (lanes 1 and 2) or 37°C (lanes 3 and 4) with (lanes 1 and 3; black bars) or without (lanes 2 and 4; gray bars) 50 μ M 4-OHT in the presence of 100 nM [3 H] DES. Subsequently all samples were washed and incubated at 37°C for 30 minutes. Results are expressed at % [3 H] DES bound. Results are the mean of three independent experiments.

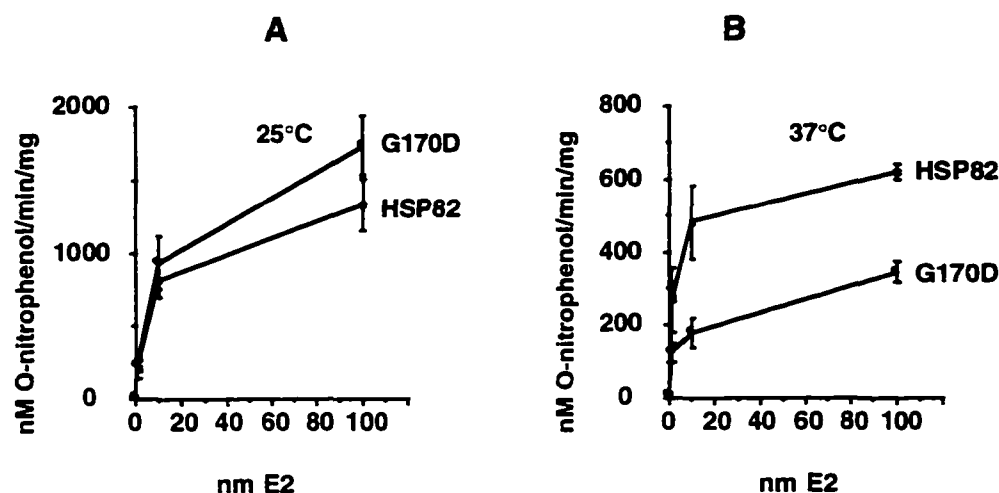


Figure 14. **E2 dependent transactivation by ER in Wild type and *hsp82*^{G170D} mutant yeast.** Wild type AFY43 (*HSP82*) and *hsp82*^{G170D} (AFY44) mutant yeast (*G170D*) which were heterologously expressing ER were incubated at 25°C (A) or 37°C (B) with increasing concentrations of E2 (0 nM-100 nM). Following the above treatments, whole cell extracts were made and β -galactosidase activity was determined and expressed as nM O-nitrophenol/ min/ mg. Results are the mean of three independent experiments.

E2 to induce *lacZ* gene expression at the permissive temperature of 25°C (Figure 14A), whereas, 100 nM E2 stimulated *lacZ* gene expression in the wild type two fold over that of the *G170D* mutant at the non-permissive temperature of 37°C (Figure 14B). Previous studies have also demonstrated that 4-OHT was able to stimulate ER driven transactivation in the yeast (Lyttle et. al., 1992). Similarly, 4-OHT was able to stimulate *lacZ* gene expression in our yeast system (Figure 15). In order to determine whether this activity of 4-OHT was dependent upon Hsp90, *lacZ* reporter gene assays were performed on both wild type and *G170D* mutant yeast treated with 4-OHT. As seen in Figure 15, there was no difference in the ability of 4-OHT to stimulate *lacZ* gene expression at the permissive temperature of 25°C (Figure 15A), however, there was approximately a 2 fold decrease in 4-OHT driven transactivation in the mutant at the non-permissive temperature of 37°C when compared to the wild type strain (Figure 15B). To see whether DES bound to the ER in the presence of 4-OHT in the *G170D* mutant could stimulate transcription of a *lacZ* reporter gene, I analyzed the ability of the ER to transactivate the *lacZ* gene in wild type and *G170D* mutant cells that had been treated with DES, DES plus 4-OHT or 4-OHT by itself. As shown in Fig. 16, DES (100nM) stimulated *lacZ* gene expression 54-fold above the background in the wild type cells (lane 1), and 15-fold in the *G170D* mutant cells (lane 4) at the restrictive temperature. By itself, 4-OHT (50 µM) stimulated *lacZ* gene expression by 22-fold in the wild type (lane 2) and 4-fold in the mutant (lane 5). Thus, both ligands have a reduced ability to stimulate *lacZ* gene expression in the mutant compared to

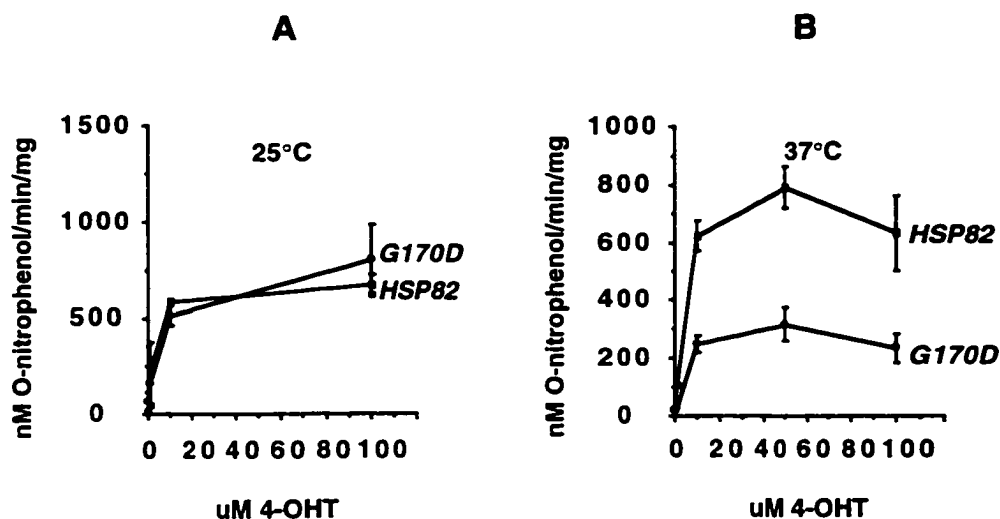


Figure 15. 4-OHT dependent transactivation by ER in Wild type and *hsp82*^{G170D} mutant yeast. Wild type AFY43 (*HSP82*) and *hsp82*^{G170D} mutant yeast (AFY44) (*G170D*) expressing ER were incubated at 25°C (A) or 37°C (B) with increasing concentrations of 4-OHT (0 μ M-100 μ M). Following the above treatments, whole cell extracts were made and β -galactosidase activity was determined and expressed as nM O-nitrophenol/min/mg. Results are the mean of three independent experiments.

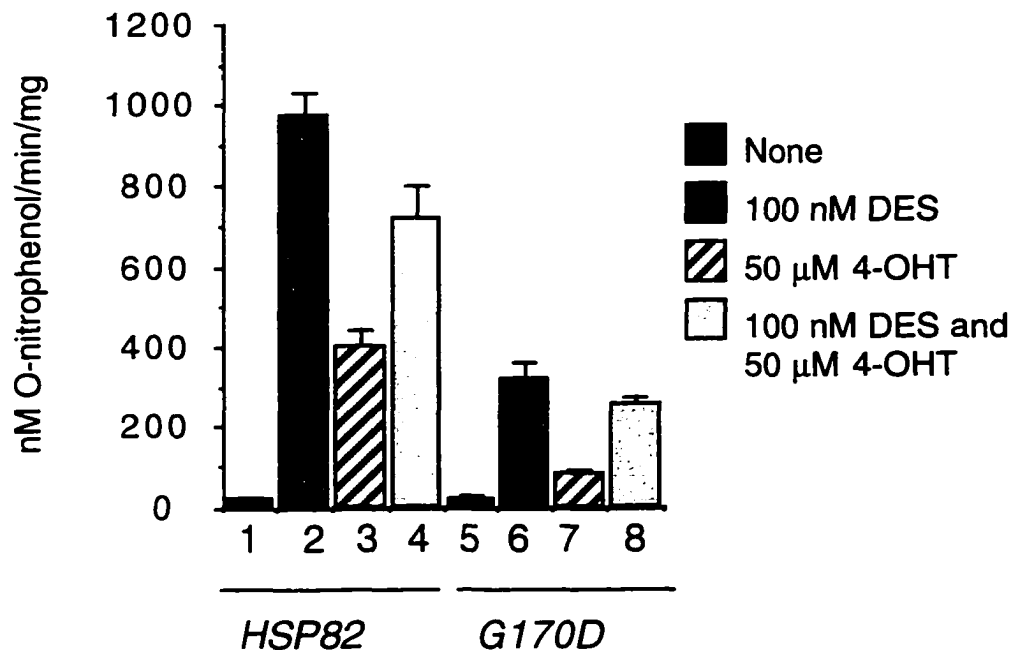


Figure 16. Transactivation by ER in Wild type and *hsp82*^{G170D} mutant yeast. Wild type AFY43 (WT; lanes 1-4) and *hsp82*^{G170D} mutant yeast (AFY44) (*G170D*; lanes 5-8) were incubated at 37°C with no treatment (lanes 1 and 5), 100 nM DES (lanes 2 and 6), 50 μM 4-OHT (lanes 3 and 7) or a combination of 100 nM DES and 50 μM 4-OHT. Following the above treatments, whole cell extracts were made and β-galactosidase activity was determined and expressed as nM O-nitrophenol/min/mg. Results are the mean of three independent experiments.

the wild type. Upon mixing both ligands, there was a 40-fold stimulation of lacZ gene expression in the wild type (lane 3) and 12-fold in the mutant (lane 6). These data indicate that those receptors which have a 4-OHT induced increase in DES binding do not act as wild type with respect to transactivation. Furthermore, these data also demonstrate that 4-OHT does not substantially decrease lacZ gene expression induced by DES alone in the wild type cells, even though 4-OHT can compete for DES binding and stimulate receptor mediated transactivation in the wild type yeast.

[3] Hormone Binding to the AR is Defective in an Hsp90 Mutant Yeast strain

Previous *in vivo* studies in yeast have demonstrated that the *hsp82^{G170D}* was defective in hormone induced activation of the AR (Fang et al, 1996). This activation defect was maximal at subsaturating hormone concentrations, suggesting that the defect may be caused by the inability of the AR to bind hormone at high affinity in this mutant strain. However, Nemoto et. al. suggests that there is no change in high affinity hormone binding to the AR with the loss of Hsp90 function (Nemoto et al, 1992). However, these studies were performed *in vitro* at 4°C with a truncated form of the AR and their physiological relevance is uncertain. The goal of the following experiments is to determine whether the defect in AR signaling in the Hsp90 mutant is caused at least in part by a defect in high affinity hormone binding.

In vivo direct hormone binding assays were performed with live yeast in order to determine whether this defect in AR activation was caused by a deficiency in hormone binding. Both wild type and *hsp82^{G170D}* temperature sensitive mutant yeast that heterologously express human AR were assayed for their ability to bind ³H R1881 methyltrielone (**R1881**), a synthetic androgen. In order to determine the level of background binding, direct hormone binding assays were performed with yeast that were not transformed with the human AR plasmid. Background binding in the yeast was negligible.

The results of the direct hormone binding assays are shown in Figure 17. At the permissive temperature of 25°C, AR in both wild type and *hsp82^{G170D}* yeast strains had similar binding isotherms and were equally able to bind R1881 (Figure 17-open symbols). These data suggest that the *hsp82^{G170D}* strain is phenotypically wild type for high affinity hormone binding to the AR at the permissive temperature. When similar hormone binding assays were performed at 37°C, the non-permissive temperature for the *hsp82^{G170D}* strain, there was a clear difference in the ability of the human AR to bind R1881 when comparing the wild type and *hsp82^{G170D}* strains (Figure 17-filled symbols). AR in the *hsp82^{G170D}* strain were decreased in their ability to bind R1881 when compared to the isogenic wild type strain. This difference was maximal at subsaturating concentrations of R1881 (Figure 17 (inset)), but was still apparent at higher hormone concentrations (Figure 17). The decrease in hormone binding seen in the mutant strain did not result from a change in steady state levels or relative stability of the AR (Fang et al, 1996).

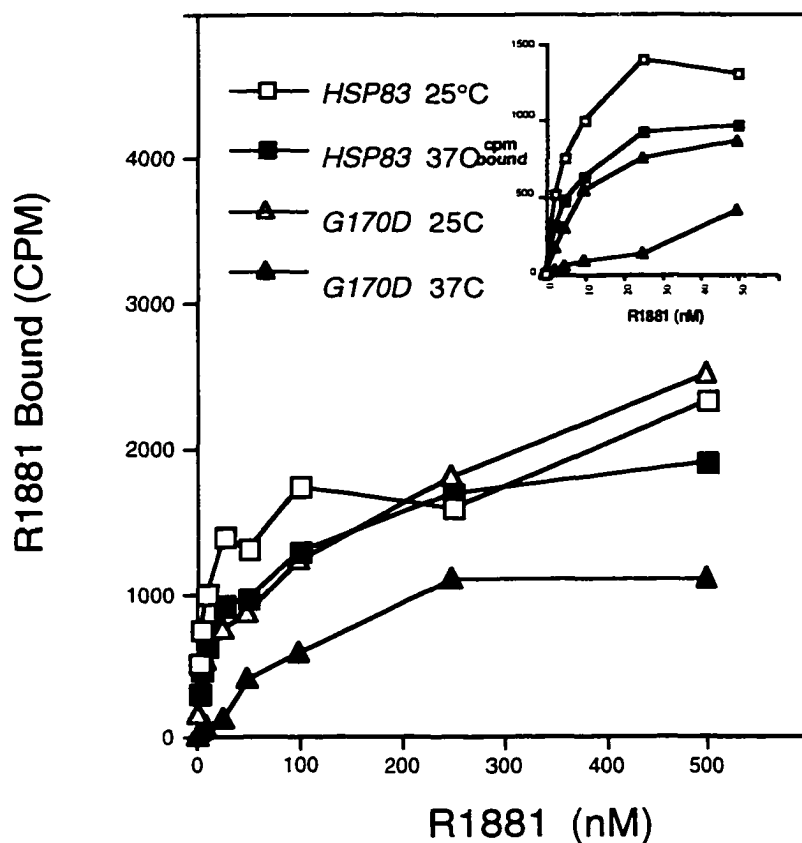


FIGURE 17. **Binding curve for AR in the wild type and *G170D* mutant yeast**. Titration of ^3H R1881 with wild type ACY98 and *hsp82*^{*G170D*} mutant yeast (ACY99) cells expressing AR at 25°C and 37°C as shown. Inset, enlarged view of ^3H R1881 titration from 0-50 nM. Legend as follows; open squares (*HSP82* at 25°C), filled squares (*HSP82* at 37°C), filled triangles (*G170D* at 37°C), open triangles (*G170D* at 25°C). Each data point is the mean of 3-5 independent experiments.

In order to determine the AR hormone binding affinity, the data from the direct hormone binding assays was analyzed according to the method of Scatchard. An estimate of the relative K_d was calculated from the Scatchard plot. As expected, there was no significant difference in the relative K_d 's of the high affinity hormone binding state of the AR when comparing the wild type and *hsp82^{G170D}* mutant strains at the permissive temperature (Figure 18A and C). At the permissive temperature, the relative K_d 's for AR in the wild type and mutant strains were 0.8 nM and 2.1 nM, respectively. Similarly at 37°C, the relative K_d for AR in the wild type strain was 1.0 nM (Figure 18B), whereas, the AR in the *hsp82^{G170D}* mutant strain were unable to bind hormone with high affinity at the non-permissive temperature (Figure 18D). AR in the mutant strain only had a low affinity binding state similar to that seen for the wild type at both temperature and *hsp82^{G170D}* yeast strains at the permissive temperature.

Earlier in this Chapter it was shown that there was an alteration in the ability of the drug 4-OHT to interact with the ER in several *hsp82* mutant yeast strains. The aim of the following experiments is to determine if Hsp90 loss of function alters the ability of the hormone antagonist HF to act as a competitive inhibitor of hormone binding to the AR.

Antagonist competition assays were performed with heterologously expressed AR in both the wild type and *hsp82^{G170D}* mutant strains. In these competition assays, live yeast cells were incubated with 100 nM ³H R1881

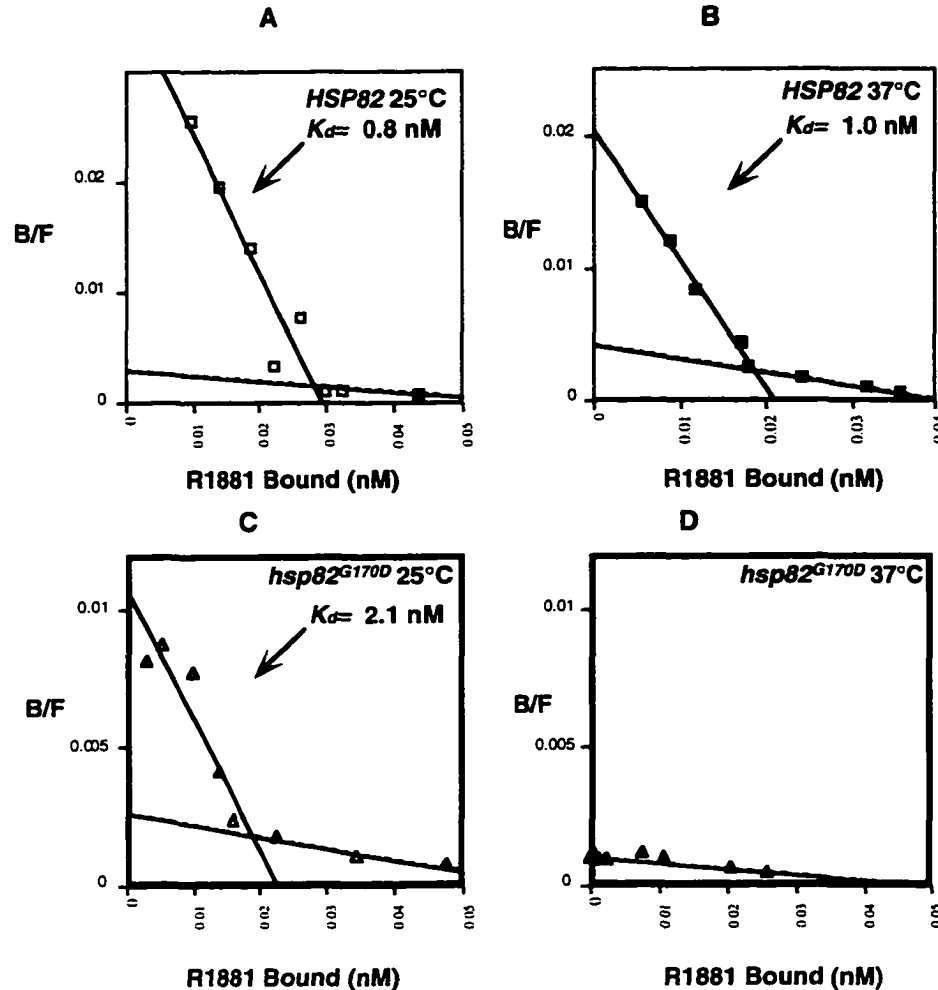


FIGURE 18. Scatchard plot for AR in the wild type and *hsp82* mutant yeast. A, Scatchard analysis of data from WT strain ACY98 at 25°C. B, Scatchard analysis of data from WT ACY98 strain at 37°C. C, Scatchard analysis of data from *hsp82* mutant strain ACY99 at 25°C. D, Scatchard analysis of data from *hsp82* mutant strain ACY99 at 37°C which were heterologously expressing AR. Each data point is the mean of 3-5 independent experiments. Legend as follows; open squares (WT at 25°C), filled squares (WT at 37°C), filled triangles (*hsp82^{G170D}* at 37°C), open triangles (*hsp82^{G170D}* at 25°C). Each data point is the mean of 3-5 independent experiments

and increasing amounts of the unlabeled HF. The results from these HF competition assays are shown in Figure 19. No significant difference was seen in the ability of HF to compete for R1881 binding to AR when comparing the wild type and *hsp82^{G170D}* strains at the permissive temperature (Figure 19A and B-open symbols). This was not unexpected since AR in the *hsp82^{G170D}* strain were wild type for hormone binding at the permissive temperature (Figure 17C). In both the *hsp82^{G170D}* and wild type strains, a 250 fold excess of HF reduced R1881 binding to about 70% of the original value. However, at the non-permissive temperature of 37°C, HF was able to compete for R1881 binding to a greater extent in the *hsp82^{G170D}* yeast strain when compared to the wild type strain (Figure 19B-closed symbols). At 25 μM HF in the *hsp82^{G170D}* strain, the remaining R1881 binding was reduced to approximately 20% of the original value, whereas, in the wild type strain R1881 binding was only reduced to 75% of the original value (Figure 19B-filled symbols).

Discussion

There has been renewed interest in the study of the function of Hsp90 since it was demonstrated to be the target for a group of anti-tumor agents called benzoquinoid ansamycins (Whitesell et. al., 1994). Recently, the amino-terminal domain of Hsp90 has been crystallized at high resolution in the presence of the benzoquinoid ansamycin, geldanamycin (Stebbins et. al., 1997). The crystal structure reveals that geldanamycin binds to the ATP binding domain of Hsp90. In addition to the geldanamycin binding domain,

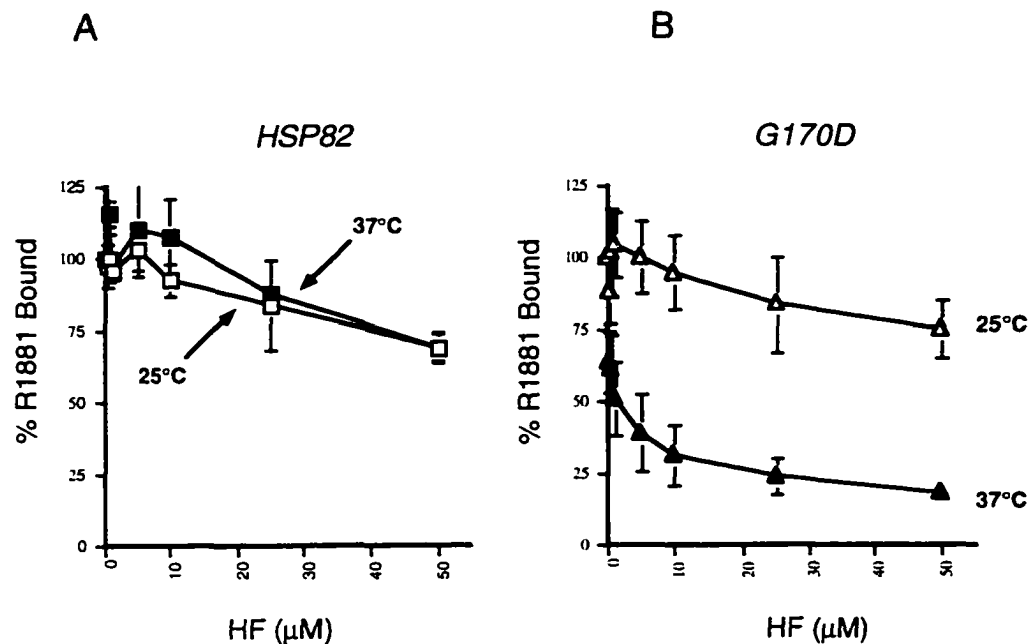


FIGURE 19. HF competition assay in wild type and *G170D* mutant yeast expressing AR. Wild Type ACY98 (A, *HSP82*) and *hsp82* mutant ACY99 (B, *G170D*) yeast strains were incubated with 100 nM ^3H R1881 and 0-50 μM HF for 1.5 hours at 25°C or 37°C. Specific binding was determined and plotted as a percentage of the counts from samples incubated with 100 nM ^3H R1881 in the absence of HF. Each point represents the mean of three independent experiments. Legend as follows; open squares (*HSP82* at 25°C), filled squares (*HSP82* at 37°C), filled triangles (*G170D* at 37°C), open triangles (*G170D* at 25°C). Each data point is the mean of 3-5 independent experiments.

Hsp90 contains a carboxy-terminal oligomerization domain and a middle domain which is known to interact with steroid hormone receptors (see Figure 7 for schematic of Hsp90 domain structure). *In vivo* studies performed using the yeast system have demonstrated that alterations in residues in either the geldanamycin binding or middle domain of Hsp90 cause a decrease hormone dependent steroid receptor activation of GR (Nathan and Lindquist, 1995; Bohlen and Yamamoto, 1993; Bohlen, 1995).

In this study it was demonstrated that mutations in the gene encoding Hsp90 affect the ability of the AR and ER to bind ligand. First, mutations in Hsp90 lead to a decrease in the ability of AR to bind R1881 and for ER to bind DES. In the *hsp82* mutant strains, AR was unable to bind R1881 to the same extent as in the isogenic wild type strain. Similarly in the *hsp82* mutant strain, ER was unable to bind DES to the same extent as in the isogenic wild type strain. Second, mutations in Hsp90 also affected the ability of hormone antagonists to compete for hormone binding to both the AR and ER. For the AR, HF was converted from a poor to a potent competitor of hormone binding to the AR upon loss of Hsp90 function. Likewise, the ability of the drug 4-OHT to compete for DES and E2 binding was altered. In several *hsp82* mutant strains 4-OHT increased hormone binding to the ER. This suggests that Hsp90 plays an important role in the folding of the AR and ER to a hormone binding state.

Hsp90 binds to unliganded ER (Reduluih et. al., 1987; Segnitz and Gehring, 1995; Ratajczak et. al., 1987; Schlatter et. al., 1992; Ratajczak et. al.,

1990) , although there is very little information on the physiological relevance of this interaction, since results from previous *in vitro* studies suggest that Hsp90 is not required for hormone binding (Binart et. al., 1995; Aumais et. al., 1997). Our results, however, are consistent with a role for Hsp90 in maintaining the ER in the high affinity hormone binding state *in vivo*, since in the absence of a functional Hsp90 the ER has a decreased ability to bind DES (Figure 4B). Ligand binding studies were initially performed with ^3H E2, but it was found that there was a high background of non-specific binding in the yeast, as originally described by Burshell et. al. (1984) and Lyttle et. al. (1992). This was due to the presence of a previously described E2 binding protein in the yeast. This problem was overcome with the use of ^3H DES, instead of ^3H E2. Recently, Segnitz and Gehring also suggested that hormone binding to the ER may be compromised in live cells treated with geldanamycin, a benzoquinoid ansamycin that specifically inhibits the function of Hsp90 (1997). Both of these results suggest that Hsp90 may play an important role in ER hormone binding *in vivo*.

Previous studies have shown that 4-OHT competes for hormone binding to the ER (Capony and Rochefort, 1978). This is in sharp contrast to the results presented here for the ER, in which 4-OHT was able to increase DES binding to the ER in the absence of a functional Hsp90 (Figure 5B). Just how does 4-OHT stimulate DES binding to the ER? In order for a protein to reach its native state presumably it must pass through a series of folding intermediates. As with most reaction intermediate, these conformers are usually transient in

nature and are normally not seen under physiological conditions. I postulate that the increase in DES binding by 4-OHT is a consequence of the partial folding of the ER to an folding intermediate which is present in *hsp82* mutant strains. This intermediate is able to bind 4-OHT in some way that increases DES binding in the absence of a functional Hsp90. It is also possible that distinct folding intermediates may exist in different *hsp82* mutants, since differences were seen in the ability of 4-OHT to increase DES binding in the various *hsp82* mutants tested (Figure 8). For example, in the *G170D* mutant, 4-OHT did not significantly increase DES binding (1.2 fold increase) to the ER at 25°C (Figure 5A and 8A), but neither did it compete for this binding. At 37°C, however, 4-OHT increased DES binding to the receptor in *G170D* by 7.5 fold (Figure 5B and 8B). This suggests that the ER may adopt more than one intermediate folding state in *hsp82* mutant strains. This mutant phenotype was fully complemented upon transformation of the mutant strains with a wild type *HSP82* plasmid as demonstrated with the heterozygote strains, suggesting that these Hsp90 mutation are recessive in nature (Figure 11). One clue to the mechanism of this phenotype was that the largest 4-OHT induced increase in DES binding (14 fold) was observed in the *G313N* mutant at 37°C (Figure 8B), which also had the least amount of mutant Hsp90 protein as detected by Western blot (Figure 10). This suggests that the 4-OHT induced increase in DES binding phenotype may occur in ER molecules that are not in direct association with Hsp90 and that the formation of this folding intermediate is dependent upon other chaperones.

Previous studies have shown that Hsp90 is required for steroid hormone receptors to transactivate target genes in yeast, and that mutations in or depletion of Hsp90 reduce this activity (Picard et. al., 1990; Bohlen and Yamamoto, 1993; Bohlen, 1995; Nathan and Lindquist, 1995; Fang et. al., 1996). In this study, I also find that mutation in Hsp90 results in a reduced ability of the ER to transactivate a target lacZ gene (Figure 14-16). As shown in Fig. 14 and 16, at the non-permissive temperature the transactivation potential of DES (Figure 16) and estradiol (Figure 14) is reduced in the *G170D* mutant strain compared with the wild type. Similar results are also seen for 4-OHT, which stimulates transactivation by the ER in yeast (Figure 15- experiments performed by Jie Rao). Taken together, these results suggest that Hsp90 is also required for ligand dependent transactivation by ER. Interestingly, the increase in DES binding by 4-OHT did not lead to a subsequent increase in transactivation in the mutant (Figure 16). This suggests that under these conditions the ER is in a conformation distinct from the active state. This could reflect the receptor having both ligands bound simultaneously to the same monomer, or by having them bound one to each monomer in a heterodimer or even a mixed population of both. Likewise, this 4-OHT stimulated increase in DES binding may not be accompanied by the proper conformational changes to allow for downstream transactivation. Alternatively, Hsp90 may have an additional role in ER action distinct or downstream of ligand binding.

Similar to the ER, Hsp90 binds to the unliganded state of the AR, however, there is little known on its role in AR activation. Previous *in vitro* studies suggest that AR is able to bind hormone in the absence of Hsp90 (Nemoto et. al., 1992). However, these studies were performed at 4°C with a truncated form of AR and can not rule out a role for Hsp90 in hormone binding to the AR. The results presented here, however, are consistent with a role for Hsp90 in maintaining the AR in a high affinity binding conformation, since in the absence of functional Hsp90 the AR is reverted to low affinity binding conformation (Figure 17-19). Under wild type conditions, there were two distinct binding states of the AR (a high and low affinity binding state), however, upon Hsp90 loss of function the high affinity binding state disappeared (Figure 18). Thus, the Hsp90 requirement for AR seems to be somewhat similar to that of PR, since at low temperature, PR is able to bind hormone in the absence of Hsp90, however, when experiments were performed at higher temperature (37°C) Hsp90 is required for hormone binding (Smith, 1993). This is in contrast to the GR, which is unable to bind hormone in the absence of Hsp90 under all conditions (Bresnick et. al., 1989).

Earlier in this chapter it was shown that there was a concurrent alteration in the ability of a hormone antagonist 4-OHT to compete for hormone binding to the ER with loss of Hsp90 function. In order to determine whether this was the case with the AR, ligand competition assays were performed on wild type and Hsp90 mutant yeast which were heterologously expressing the AR. Previous studies have shown that the AR antagonist HF is able to bind to the AR and

compete for hormone binding, but the affinity of this interaction is approximately 50 fold less than that of dihydrotestosterone (DHT) (Veldscholte et. al., 1992; Wong et. al., 1995). Thus, under normal conditions HF is a poor competitor of hormone binding to the AR. The results presented here for the wild type yeast confirm this observation (Figure 19A). In the presence of wild type Hsp90, a 500 fold excess of HF was only able to reduce R1881 binding to 70-80% of the original value (Figure 19A). However, upon Hsp90 loss of function, HF was able to acts as a more potent competitor of R1881 binding (Figure 19B). Under these loss of function conditions, HF was able to reduce R1881 binding to approximately 20% of its original value (Figure 19B-closed symbols). These data demonstrate a concurrent alteration in the ability of HF to compete for hormone binding to the AR. This alteration is quite different from the one seen with 4-OHT and the ER. Instead of potentiating hormone binding as 4-OHT did with DES binding to the ER, HF was made a more potent competitor in the loss Hsp90 function. This suggests that Hsp90 plays slightly different roles in the regulation of hormone binding when comparing the AR and ER, possibly revealing an inherent difference in their requirement for molecular chaperones. These differences may in fact be in the types and stability of folding intermediates formed in the pathway to the maturation of the AR and ER. Taken together the studies presented here demonstrate that Hsp90 plays an important role in the attainment or maintenance of hormone binding to both the AR and ER.

Experimental Methods

Materials

DHT, E2, DES and 4-OHT were obtained from Sigma Chemical Company. R1881 was purchased from NEN. The above compounds were solubilized in ethanol and stored at -20°C. Antisera to ER was a kind gift of Dr. G. Greene. Antisera to Hsp90 and AR was previously described (Fang et. al., 1996). Antisera to yeast phosphoglycerate kinase was a kind gift of Dr. P. Lazarow. ³H DES, ³H E2 and ³H R1881 were purchased from American Radiochemical Company, NEN, and NEN respectively. Isogenic wild type and *G170D* mutant yeast strains were a kind gift of Dr. S. Lindquist. Plasmids encoding the *A97I* (pts38RV), *T101I* (pcs2-3RV) and *S485Y* (pts33BE) *hsp82* mutants were kind gift of Dr. Y. Kimura and those encoding *E431K* (pTCA/hsp82 E431K), *G313N* (pTCA/hsp82 G313N) and *T525I* (pTCA/hsp82 T525I) were kind gift of Dr. K. Yamamoto.

Plasmid Constructions

Plasmids that express the AR (pARU and pARH) were derived from pG1-hAR as described by Caplan et al. (1995). Briefly, pARU was constructed by inserting a blunt-ended URA3 fragment into EcoRV-linearized pG1-hAR (inside the TRP1 gene). pARH was constructed by inserting a blunt-ended HIS3 gene

fragment into EcoRV-linearized pG1-hAR. pPGKareLacZC contains the lacZ gene under control of three cis-acting androgen response elements as described by Purvis et al. (Purvis et. al., 1991). The human ER open reading frame from p2HGPDER/CYC (Picard et. al., 1990) was subcloned into the vector pRS424 (Christianson et. al., 1992). Briefly, p2HGPDER/CYC was digested with SpeI and XhoI and the 3 kb insert containing the open reading frame of the hER was gel purified and subsequently subcloned into similarly digested pRS424 using standard methods. The resultant plasmid was designated pJR3.

Yeast Methods and Strains

Saccharomyces cerevisiae strains used in this study were derived from W3031a. Standard genetic methods were utilized for the growth and manipulation of the yeast *Saccharomyces cerevisiae*. These yeast strains were grown in either rich media (YPD) or selective media (SD) containing 0.67% yeast nitrogen base, 2% glucose with the additions of either adenine, uracil and/or the amino acids depending on auxotrophy. Yeast transformations were performed according to the method previously described (Geitz et. al., 1995).

The *hsp82* mutant strains (except for *G170D* which was the gift of Dr. S. Lindquist) were constructed from strain p82a (Nathan and Lindquist, 1995) as previously described (Fang et al., 1998). This strain was transformed with

pJR1 (Fang et al., 1998) (CEN6/ARS4/HSP82/URA3), and the resulting strain (AFY2W) was grown in rich medium to deselect for pTGPD (HSP82/TRP1). Resulting TRP auxotrophs were designated AFY1WU. This strain was then transformed with plasmids containing *hsp82* mutant genes (see below) and subsequently plated on 5-fluoro-orotic acid to select for loss of pJR1. The resulting strains all contained a single *hsp82* mutant allele. Yeast strains containing the *E431K* (pTCA/*hsp82* E431K), *G313N* (pTCA/*hsp82* G313N) or *T525I* (pTCA/*hsp82* T525I) mutant alleles were transformed with the ER expression plasmid p2HGPDER/CYC (Picard et. al., 1990). Yeast strains containing *A97I* (pts38RV), *T101I* (pcs2-3RV) or *S485Y* (pts33BE) were transformed with the ER expression plasmid pJR3. The p82a and *G170D* yeast strains were transformed with both p2HGPDER/CYC (Picard et. al., 1990). and pUC Δ SS-ERE (Picard et. al., 1990).

β -Galactosidase Activity Assay

Yeast cells were grown to early log phase ($OD^{600} = 0.2$) and preincubated at either 25°C or 37°C for one hour prior to the addition of either 17 β -estradiol, DES, 4-OHT or a combination of DES and 4-OHT. These cells were then incubated for an additional 2 hours at the same temperature prior to harvesting and the preparation of extracts as previously described (Caplan et. al., 1995) β -galactosidase activity assays were performed as previously described (Caplan et. al., 1995).

Ligand Binding Assays

Yeast cells were grown in selective media containing 2% glucose to early log phase ($OD^{600} = 0.2$) and 1 ml aliquots were subsequently incubated at either 25°C or 37°C for 30 minutes. Following this preincubation, cells were incubated with either 3H R1881 for the AR or 3H DES for the ER for an additional 1.5 hours at the same temperature. The cells were then washed 3 times with 1 ml of water each and counted in 5 ml of liquid scintillation fluid. Non-specific bound cpm was calculated by subtracting the cpm obtained from samples which were incubated with a 100 fold excess of unlabeled R1881 for the AR or DES for the ER from the samples incubated in the absence of cold R1881 or DES.

Ligand competition assays were also performed with yeast cells which were grown to early log phase ($OD^{600} = 0.2$) as described above. Following a 30 minute preincubation at either 25°C or 37°C, cells were incubated with 100 nM 3H R1881 for the AR and either 100 nM 3H DES or 3H 17 β -estradiol for the ER in the presence or absence of increasing concentrations of HF for the AR and 4-OHT for the ER for an additional 1.5 hours at the same temperature. The cells were then washed 3 times with 1 ml of water each and counted in 5 ml of scintillation fluid.

Temperature shift DES dissociation assays were performed as follows. *G170D* cells were grown in selective media containing 2% glucose to early log phase ($OD^{600} = 0.2$) and were subsequently incubated at either 25°C or 37°C

for 30 minutes. Subsequently, yeast cells were incubated with 100 nM ^3H DES in the presence of 50 μM 4-OHT for 1.5 hours at the same temperature as the preincubation. The cells were then washed 3 times with an equal volume of media. Following the wash, an aliquot of cells was counted in 5 ml of liquid scintillation fluid. The remainder of the cells were incubated for an additional 30 minutes at either 25°C or 37 °C in fresh media plus or minus 10 μM DES or 50 μM 4-OHT. Aliquots were removed for counting as described above. CPM were represented at percent remaining bound DES compared to the initial aliquot counted.

Western Blot Analysis

The levels of ER and Hsp90 were assayed by Western blot analysis using either anti-ER or anti-Hsp90 specific antibodies. Yeast lysates were prepared as previously described (Caplan et. al., 1995) .Lysates (10 μg total protein) were resolved by SDS-PAGE and the proteins in the gel were subsequently transferred to nitrocellulose (0.45 μm , MSI). Filters were briefly rinsed with 20 mM Tris-HCl, pH 7.5, 0.5 M NaCl, 0.05% Tween 20 (**TTBS**) and blocked overnight at room temperature with TTBS containing 5% non-fat dry milk. Filters were subsequently incubated with antibodies specific for the ER or yeast Hsp90 (antibodies were diluted in antibody dilution buffer, 1x PBS, 3% bovine serum albumin, 0.05% Tween 20 and 0.1% thimerosal (1:1000 for anti-Hsp90 and 1:2000 for anti-ER) for either 1 hour (anti-Hsp90) or 4 hours (anti-ER).

Filters were washed three times for 10 minutes each in TTBS. Filters were then incubated with secondary antibody (Horseradish Peroxidase (HRP) conjugated goat anti-rat IgG, diluted 1:2000 in antibody dilution buffer for anti-ER; and HRP conjugated goat anti-mouse IgG, diluted 1:10,000 in antibody dilution buffer for anti-Hsp90) for 1 hour and subsequently washed three times for 10 minutes each in TTBS. Filters were treated with the chemiluminescence reagent (Pierce) and exposed to X-ray film. An identical filter was probed with anti-phosphoglycerate kinase (**PGK**) (1:300,000 in antibody dilution buffer) to control for loading differences. The secondary antibody for the anti-PGK was HRP conjugated goat anti-rabbit IgG (1:10,000 in antibody dilution buffer). Washes and incubation times were identical to that for anti-Hsp90 and anti-ER.

CHAPTER III

**CHARACTERIZATION OF THE ROLE OF
YDJ1 IN ANDROGEN AND ESTROGEN
RECEPTOR ACTION**

Introduction

As previously described, the Hsp90 chaperone machine is comprised of multiple components including Hsp70 and its regulatory factors. Previous studies have demonstrated that Hsp70 is required for hormone binding to the GR and PR *in vitro* (Hutchison et. al., 1993; Smith et. al., 1992). Hutchison et. al. demonstrated that upon depletion of Hsp70, GR was unable to bind hormone and likewise the aporeceptor complex containing Hsp90 was not formed. One of the known co-chaperones that helps regulate the Hsp70 reaction cycle is *E. coli* DnaJ (Liberek et. al., 1991a) (see Figure 20 for Hsp70 reaction cycle). Ydj1 is the yeast homologue of DnaJ (Caplan et. al., 1991). Ydj1, like dnaJ, also stimulates the normally low level ATPase activity of Hsp70, which is required for Hsp70 to bind polypeptide substrates (Tsai and Douglas, 1996; Liberek et. al., 1991b). In its ATP bound form, Hsp70 is unable to stably bind and fold polypeptides, whereas, in its ADP bound form Hsp70 stably interacts with polypeptides. All J proteins contain a characteristic amino-terminal J domain (see for review Cheetham and Caplan, 1998). This characteristic J domain along with the glycine and phenylalanine rich region is responsible for the ability of J proteins to stimulate Hsp70's ATPase activity (Wall et al, 1994). Likewise, some J proteins also contain a zinc finger and carboxy-terminal domain which have chaperoning functions of their own (Lu and Cyr, 1997; Szabo et. al., 1995). Based on their domain structure, J

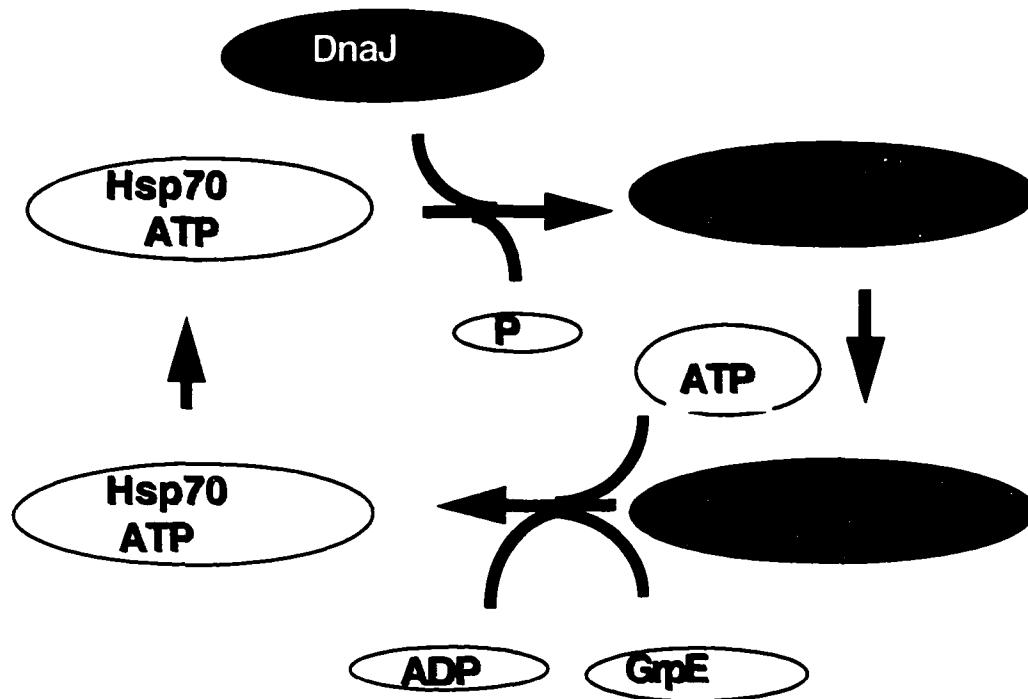


Figure 20. Hsp70 Reaction Cycle

proteins can be grouped into 3 main categories (see Figure 21); 1) Type 1 J proteins which contain the J, G/F and zinc finger domains and 2) Type 2 J proteins which contains the JGF domain, but lacks the zinc finger domain and 3) Type 3 which contains only the J domain (See for review Cheetham and Caplan, 1998). Ydj1 and its human homologue Hdj2 are considered as Type 1 J proteins since they contain a zinc finger-like domain carboxy-terminal to the J G/F domain (see Figure 22) (Caplan et al, 1991; see review Cheetham and Caplan, 1998). Using the yeast model system, Caplan et al (1995) demonstrated that Ydj1 is required for the *in vivo* activation of AR, since hormone-dependent activation of the AR was decreased in yeast strains containing either a deletion of ($\Delta ydj1$) or mutation in (*ydj1-151* which contains multiple point mutation throughout the coding sequence) the *YDJ1* allele. This activation defect was mediated via the HBD (Caplan et al, 1995). A similar study demonstrated that a yeast strain containing a *ydj1^{G315D}* mutant allele (contains a mutation in the carboxyterminal domain) caused derepression of hormone induced ER and GR activation. In these experiments, yeast strains containing the *ydj1^{G315D}* mutant allele had increased levels of hormone independent activity (Kimura et al, 1995). These data suggest a possible dual role for Ydj1 in steroid receptor activation.

In this study the yeast is used as a model system in order to determine the role that Ydj1 plays in hormone binding and activation of the AR and ER. A combination of hormone binding and ligand competition assays were utilized in an effort to determine which domains of Ydj1 are required for AR signaling

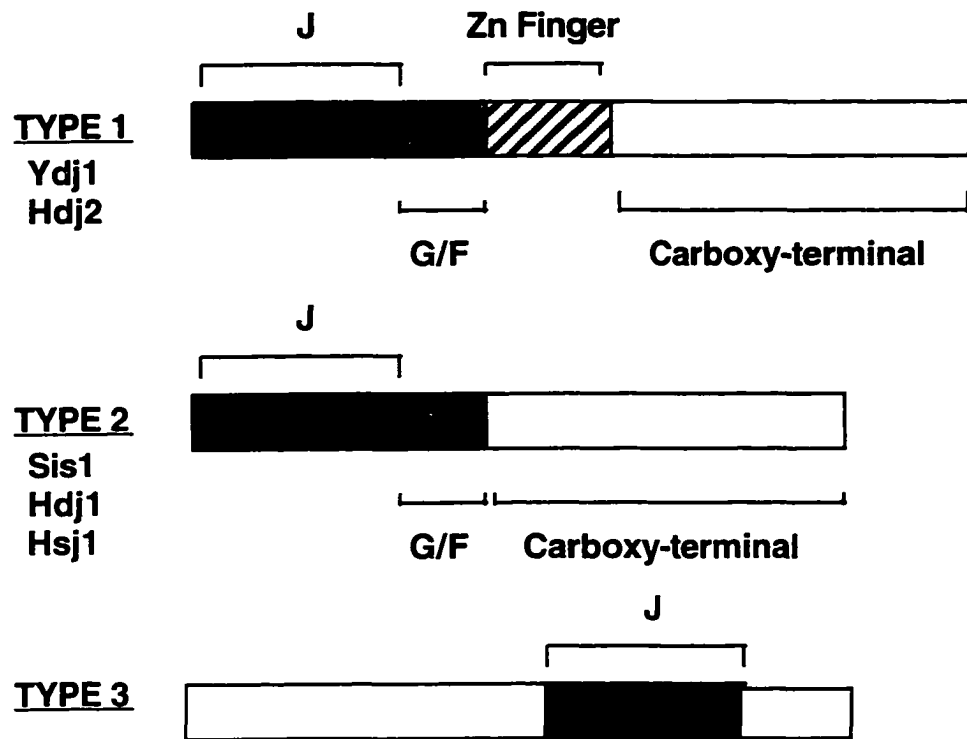


Figure 21. **Catergories of J Proteins**

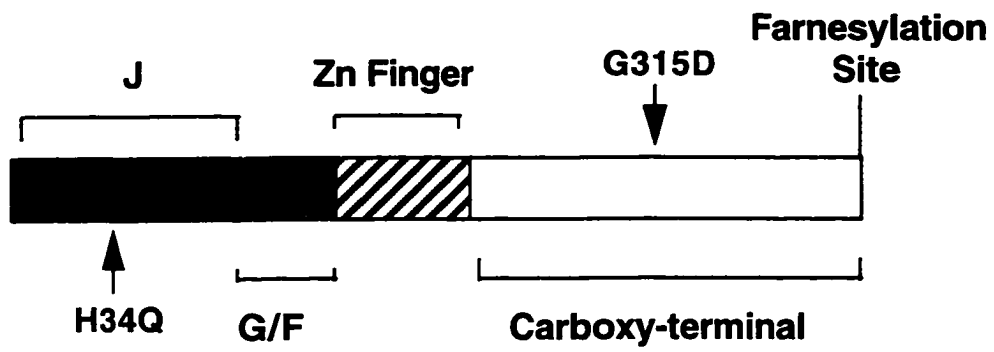


Figure 22. **Domain Structure of Ydj1**

activity. The results from these experiments suggest that Ydj1 is acting via the J and zinc finger domains to allow for wild type hormone binding to the AR and most probably ER. The results presented here also suggest that Ydj1 or more correctly its human counterpart (Hdj2) is required for high affinity hormone binding to both the AR and the ER.

Results

Previous studies have demonstrated that both AR and ER signaling are defective in yeast that contain a mutation or deletion of Ydj1p (Caplan et al., 1995; Kimura et al., 1996) and in the case of the AR this defect is mediated via the HBD. Therefore studies were initiated to test whether Ydj1 was required for hormone binding to the AR and ER. Ligand binding studies were performed on both wild type and ydj1 mutant yeast which had been transformed by a plasmid constitutively expressing either the AR or the ER.

[1] R1881 Binding to the AR is Defective in the Absence of Ydj1p

To test whether Ydj1 is required for hormone binding to the AR, direct hormone binding assays were performed on AR heterologously expressed in either the isogenic wild type and $\Delta ydj1$ mutant yeast. Initial studies were performed on a strain lacking Ydj1p ($\Delta ydj1$). Loss of Ydj1p resulted in a temperature sensitive growth phenotype where the cells are viable, but slow growing at 25°C, and inviable at 37°C (Figure 23). AR expressed in both of these strain was able to specifically bind R1881. This specific binding was

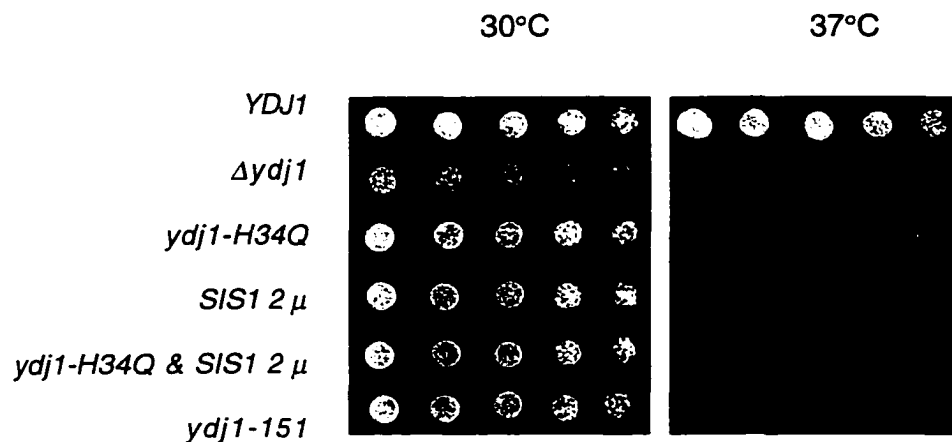


Figure 23. Growth characteristics of the yeast *ydj1* mutant strains. Serial dilutions of yeast cells and growth at 30°C and 37°C. Wild type strain MYY290AR (*YDJ1*), $\Delta ydj1$ strain AFY100AR ($\Delta ydj1$), *ydj1-H34Q* in $\Delta ydj1$ strain AFY100H34Q (*ydj1-H34Q*), *SIS1* 2 μ in $\Delta ydj1$ strain AFY100SIS1 (*SIS1* 2 μ), both *ydj1-H34Q* and *SIS1* 2 μ in $\Delta ydj1$ strain AFY34Q/SIS (*ydj1-H34Q* *SIS1* 2 μ) and *ydj1-151* in $\Delta ydj1$ strain AFY100-151 (*ydj1-151*).

dependent upon the presence of the AR, since binding was negligible in the absence of the receptor. As seen in Fig. 24, there was a decrease in the ability of the AR to bind R1881 in the $\Delta ydj1$ strain at 25°C when compared to that of the isogenic wild type strain, even though receptor levels were similar as determined by Western blot analysis (Figure 25). This decrease in hormone binding was apparent at both saturating (3 fold decrease) and subsaturating (>6 fold decrease) levels of ^3H -R1881. This indicates that the AR is decreased in its ability to bind hormone in the absence of Ydj1p.

As demonstrated in Chapter 2, a concurrent alteration in the ability of HF to compete for hormone binding to the AR was seen in the absence of functional Hsp90. HF was a more potent competitor of R1881 binding to the AR with Hsp90 loss of function. In order to determine if there was a similar alteration in the ability of HF to compete for hormone binding in the absence of Ydj1p, ligand competition assays were performed on heterologously expressed AR in the both the wild type and $\Delta ydj1$ strains as previously described. In these competition assays, live yeast cells were incubated with a fixed amount of ^3H R1881 and increasing amounts of the unlabeled antagonist HF. The results are shown in Figure 26. As can be seen in Fig. 26, HF is a poor competitor of R1881 binding to the AR in the wild type strain at 25°C (filled triangles). In the wild type strain, a 250 fold excess of HF was only able to reduce R1881 binding to approximately 80% of its original value. In contrast, when the same experiments were performed with the $\Delta ydj1$ strain, similar concentrations of cold HF were able to reduce R1881 binding to approximately 30% of its

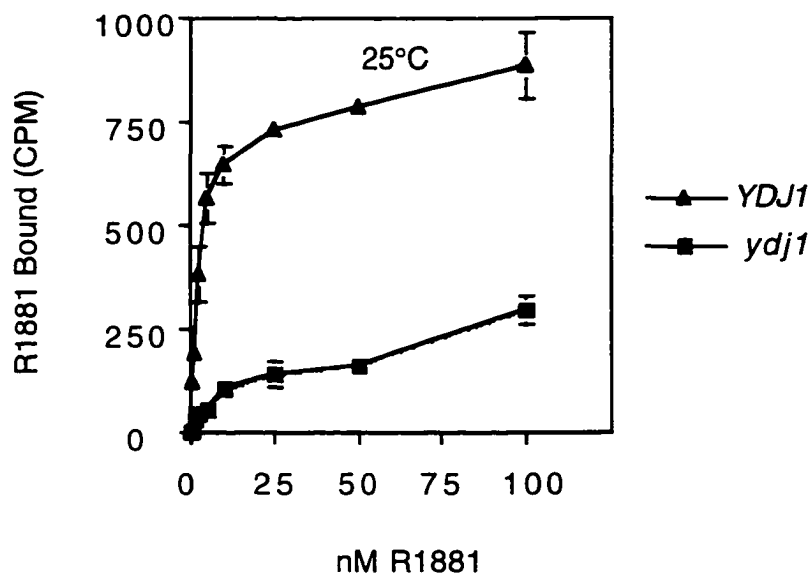


Figure 24. Hormone binding to AR in wild type *YDJ1* and $\Delta ydj1$ mutant yeast strains. Titration of ^3H -R1881 in yeast cells heterologously expressing AR. AR in wild-type strain MYY290AR (*YDJ1*; filled triangles) and $\Delta ydj1$ mutant strain AFY100AR ($\Delta ydj1$; filled squares) were tested for R1881 binding at 25°C. Results are the mean of three independent experiments.

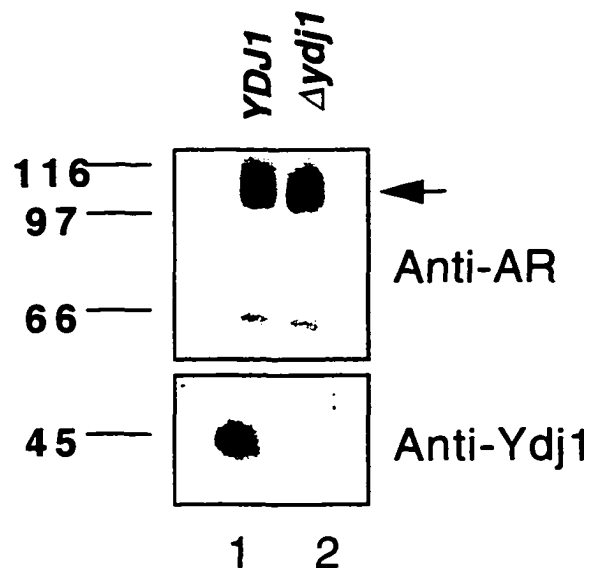


Figure 25. **Western blot analysis of AR in wild type and $\Delta ydj1$ mutant yeast.** (top panel; arrow denotes location of AR and star denotes breakdown product of AR) and Ydj 1 (lower panel; arrow denotes location of Ydj 1). Analysis was performed on whole cell extracts of wild type strain MYY290AR (YDJ1; lane 1) and $\Delta ydj1$ strain AFY100AR ($\Delta ydj1$; lane 2) yeast expressing AR probed with either antisera specific for AR (top panel) or Ydj 1p (bottom panel). Molecular weight standards are shown in kDa.

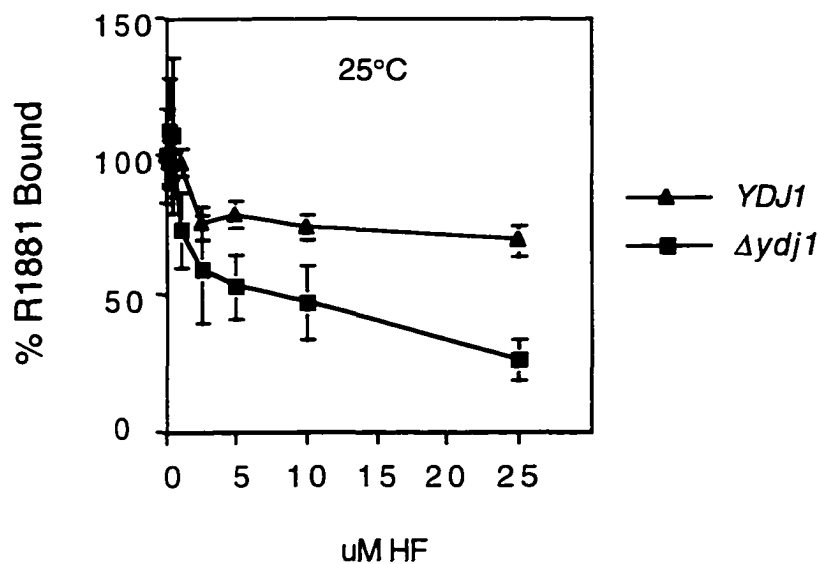


Figure 26. **HF competition assay on AR in wild type *YDJ1* and $\Delta ydj1$ mutant yeast.** Wild type strain MYY290AR (*YDJ1*; filled triangles) and $\Delta ydj1$ ($\Delta ydj1$; filled squares) mutant strain AFY100AR heterologously expressing AR were incubated at 25°C with increasing amounts of $\mu\text{M HF}$ in the presence of 100 nM 3H R1881. Results are expressed as a percentage of the 3H R1881 binding in the presence of HF. Results are the mean of three independent experiments.

original value (Figure 26-closed squares). This indicates that the ability of HF to compete for hormone binding to the AR is altered in the absence of Ydj1p, similar to that seen for Hsp90 (Chapter 2).

[2] The J Domain, but not the Carboxy-terminal domain of Ydj1 is Required for Hormone Binding to the AR

Ydj1 and other Type 1 J proteins contain three major domains (see Figure 21 for schematic); 1) the conserved J G/F domain is responsible for stimulating the normally low level of ATPase activity of Hsp70 (Liberek et. al., 1991; Tsai and Douglas, 1996), 2) the zinc finger domain (which is only seen in Type 1 J proteins), and 3) the carboxy-terminal domain. Both the zinc finger and carboxy-terminal domains have chaperoning functions of their own (Lu and Cyr, 1997; Szabo et. al., 1995). In order to determine which domains of Ydj1 are required for ligand binding and whether these affects are via Hsp70, direct hormone binding and HF competition assays were performed on $\Delta ydj1$ yeast which were transformed with various yeast Ydj1 homologues and mutants (see Table 2 for list). The yeast J mutants and homologues are broken up into 4 major group according to their defect; 1) those that are defective in J domain function which include *ydj1-H34Q* (Lu and Cyr, 1998), *ydj1-39* (Dey et. al., 1996), 2) those that only contain the J/GF domain, but lack the zinc finger domain and farnesylation signal which includes SIS1, 3) those that are defective in the carboxy-terminal domain which includes *ydj1-G315D* (Kimura et. al., 1995), 4) those mutants that had combination defect including *ydj1-151*

TABLE 2: YDJ1 Homologue and Mutant Alleles

Yeast YDJ1 Homologues and Domains

<i>ydj1-151</i>	contains 13 point mutations throughout the <i>YDJ1</i>
<i>ydj1-H34Q</i>	functional deletion of ATPase stimulatory domain
<i>ydj1-G315D</i>	mutation in carboxy-terminal domain
<i>ydj1-39</i>	contains 2 point mutations in J domain
<i>SIS1</i>	Yeast homologue of <i>dnaJ</i>

Human YDJ1 Homologues

<i>HDJ1</i>	Human J homologue without Zn finger domain
<i>HDJ2</i>	Human J homologue of <i>YDJ1</i> (contains all domains)
<i>HSJ1</i>	Human J homologue without Zn finger domain

(Caplan et. al., 1995) and *ydj1-H34Q/SIS1* expressed in trans. As demonstrated in Fig. 23, transformation of the $\Delta ydj1$ strain with either *ydj1-H34Q*, *ydj1-151*, *SIS1* 2 μ or *ydj1-H34Q/SIS1* trans were able to complement the slow growth at 25°C phenotype, but none complemented the temperature sensitive growth at 37°C. The results of the direct hormone binding assays for the J domain mutants are represented in Fig. 27 and 28. Yeast that contain either the *ydj1-H34Q* (Figure 27-open circles) or *ydj1-39* (Figure 28-closed squares) mutant alleles demonstrated a decrease in R1881 binding when the experiments were performed at 25°C, when compared to wild type yeast. Expression of *ydj1-H34Q* in the $\Delta ydj1$ parental strain was only able to partially complement (two fold increase over $\Delta ydj1$) the hormone binding defect, indicating that the J domain is required to some extent for wild type hormone binding. Likewise, overexpression of *SIS1* (contains J G/F domain, but lacks the zinc finger domain and farnesylation signal which are present in Ydj1p) in the $\Delta ydj1$ strain was only able to partially complement the hormone binding defect (Figure 27-open triangles) (two fold over $\Delta ydj1$). When experiments were performed with either *ydj1-H34Q* or *SIS1* at 37°C a similar decrease in R1881 binding was observed (Figure 29A). In order to determine whether the J domain acts in *cis* or in *trans* with either the remainder of the molecule, direct hormone binding assays were performed on $\Delta ydj1$ yeast that had been transformed with both the *ydj1-H34Q* and 2 μ *SIS1* plasmid. As seen in Fig. 27, the expression of *ydj1-H34Q* and *SIS1* on separate plasmids was unable to fully complement the hormone binding defect exhibited in the $\Delta ydj1$ strain

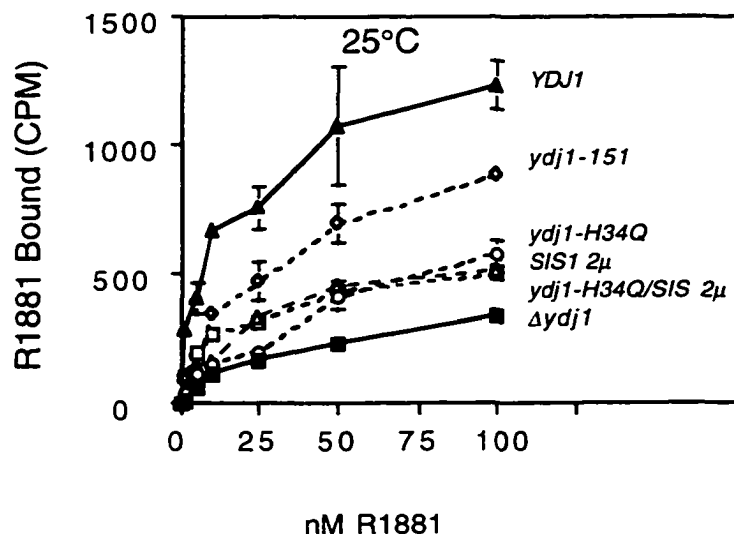


Figure 27 Hormone binding to AR in *ydj1* mutant yeast strains. Titration of ^3H -R1881 in *ydj1* mutant yeast cells heterologously expressing AR. AR in Δ *ydj1* mutant cells transformed with pAV7 strain AFYpAV7 (low copy number plasmid containing wild type *YDJ1*) (*YDJ1*; filled triangles), Δ *ydj1* mutant strain AFY100AR (Δ *ydj1*; filled squares), Δ *ydj1* cells transformed with *ydj1-H34Q* strain AFY100H34Q (low copy number plasmid containing *ydj1-H34Q* mutant allele) (*ydj1-H34Q*; open circles), Δ *ydj1* mutant yeast transformed with *SIS1* strain AFY100SIS1 (*SIS1*, 2 μ plasmid) (*SIS1* 2 μ ; open triangles), Δ *ydj1* mutant yeast transformed with both *ydj1-H34Q* and *SIS1* strain AFY34Q/SIS (*ydj1-H34Q/SIS1* 2 μ ; open squares) and Δ *ydj1* transformed with *ydj1-151* containing plasmid strain AFY100-151 (*ydj1-151*; open diamonds) were tested for R1881 binding at 25°C. Results are the mean of three independent experiments.

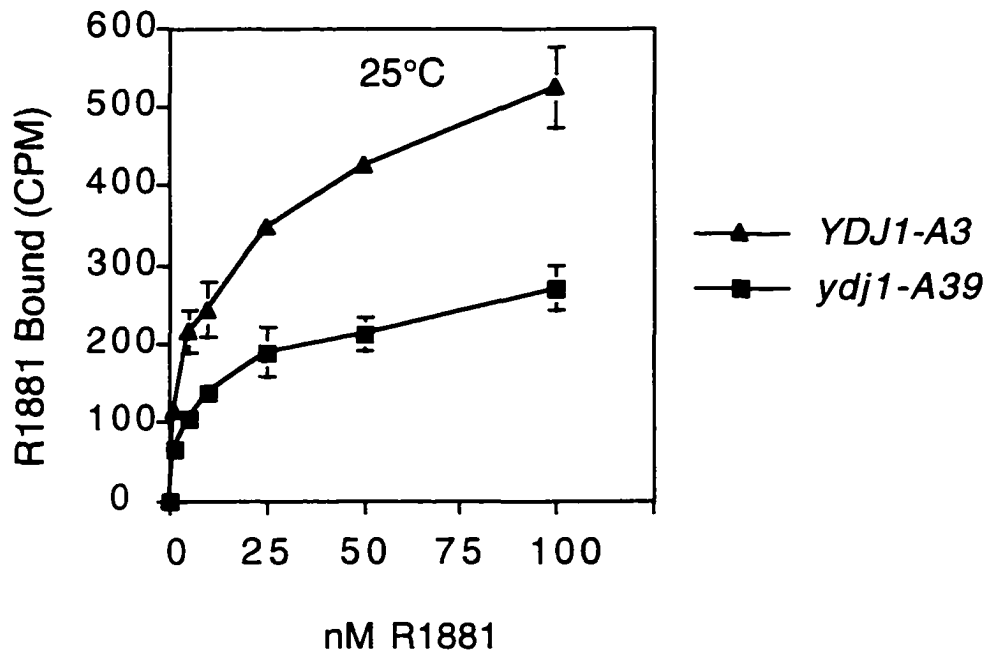


Figure 28. **Hormone binding to AR in wild type and *ydj1-39* mutant yeast strains.** Titration of ^3H -R1881 in wild type and *ydj1-39* mutant yeast strains heterologously expressing AR. AR in wild type (*YDJ1-A3*; closed triangle) and *ydj1-39* mutant (*ydj1-A39*; closed squares) yeast cells were tested for R1881 binding at 25°C. Results are the mean of three independent experiments.

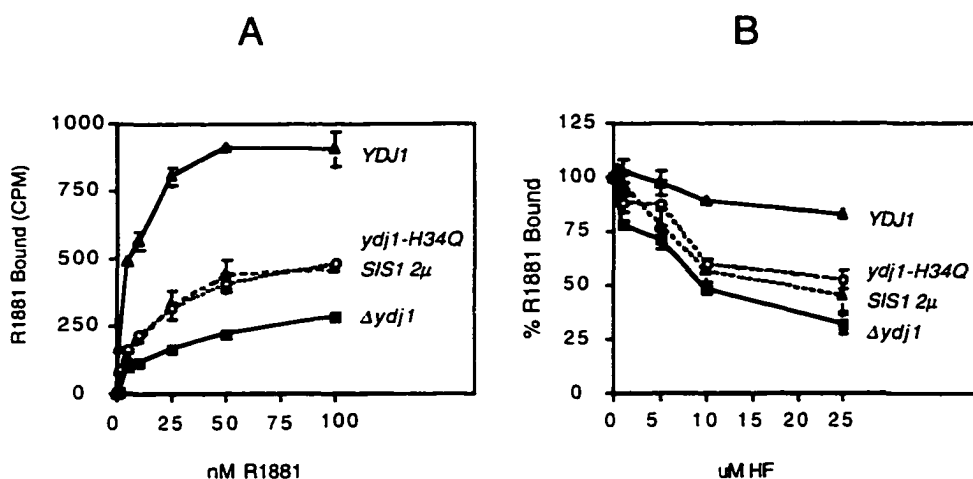


Figure 29. Ligand binding to AR in *ydj1* mutant yeast strains. (A) Titration of 3H-R1881 in *ydj1* mutant yeast cells heterologously expressing AR. AR in $\Delta ydj1$ mutant cells transformed with pAV7 strain AFYpAV7 (low copy number plasmid containing wild type *YDJ1*) (*YDJ1*; filled triangles), $\Delta ydj1$ mutant strain AFY100AR ($\Delta ydj1$; filled squares), $\Delta ydj1$ cells transformed with *ydj1-H34Q* strain AFY100H34Q (low copy number plasmid containing *ydj1-H34Q* mutant allele) (*ydj1-H34Q* open circles), and $\Delta ydj1$ mutant yeast transformed with *SIS1* strain AFY100SIS1 (*SIS1*, 2μ plasmid) (*SIS1 2μ*; open triangles) were tested for R1881 binding at 37°C. Results are the mean of three independent experiments. (B) AR in $\Delta ydj1$ mutant cells transformed with pAV7 strain AFYpAV7 (low copy number plasmid containing wild type *YDJ1*) (*YDJ1*; filled triangles), $\Delta ydj1$ mutant strain AFY100AR ($\Delta ydj1$; filled squares), $\Delta ydj1$ cells transformed with *ydj1-H34Q* strain AFY100H34Q (low copy number plasmid containing *ydj1-H34Q* mutant allele) (*ydj1-H34Q* open circles), and $\Delta ydj1$ mutant yeast transformed with *SIS1* strain AFY100SIS1 (*SIS1*, 2μ plasmid) (*SIS1 2μ*; open triangles) were incubated at 37°C with increasing amounts of μM HF in the presence of 100 nM 3H-R1881. Results are expressed as a percentage of the 3H-R1881 binding in the presence of HF. Results are the mean of three independent experiments.

(open squares), indicating that the J domain works in *cis* with the remainder of Ydj1 to allow for wild type hormone binding. In fact, expression of both SIS1 and ydj1-H34Q in *trans* was unable to increase hormone binding over that of each alone. Interestingly, expression of the *ydj1-151* (contains multiple point mutations in all domains with the exception of the J), which was previously demonstrated to be defective in AR signaling (Caplan et al., 1995), was able to almost fully complement the hormone binding defect of the $\Delta ydj1$ strain (Fig. 27-open triangles) (three fold increase over $\Delta ydj1$). The only Ydj1 mutant or homologue that was not defective in hormone binding was the *ydj1-G315D* (Figure 30-closed squares), which contains a mutation in the conserved carboxy-terminal domain. R1881 binding in the *ydj1-G351D* strain was in fact somewhat higher than that of its isogenic wild type partner both at 25°C and 37°C, indicating that the carboxy-terminal domain is not necessary for hormone binding to the AR.

In order to determine which domains are responsible for the increase in HF competition seen in the $\Delta ydj1$ strain, HF competition assays were performed on the same Ydj1 mutants and yeast homologues as with the direct hormone binding assays. Results for the HF competition assays are shown in Figure 31-33. Similar to the situation with direct hormone binding, neither *ydj1-H34Q* nor *SIS1* nor a combination of *ydj1-H34Q* and *SIS1* (Figure 31) nor *ydj1-39* (Figure 32) were able to fully restore HF competition to wild type levels with the exception of the *ydj1-151* mutant which was also essentially wild type for hormone binding as measured in the direct hormone binding assays Fig. 27

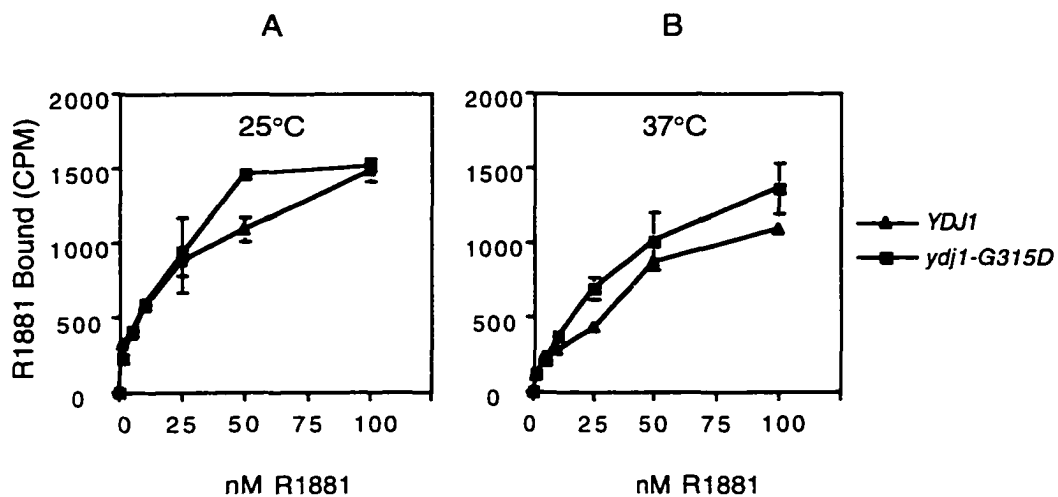


Figure 30. **Hormone binding to AR in wild type and *ydj1-G315D* mutant yeast strains.** Titration of ^3H -R1881 in wild type and *ydj1-G315D* mutant yeast cells heterologously expressing AR. AR in wild type (*YDJ1*; closed triangle) and *ydj1-G315D* mutant (*ydj1-G315D*; closed squares) yeast cells were tested for R1881 binding at 25°C. Results are the mean of three independent experiments.

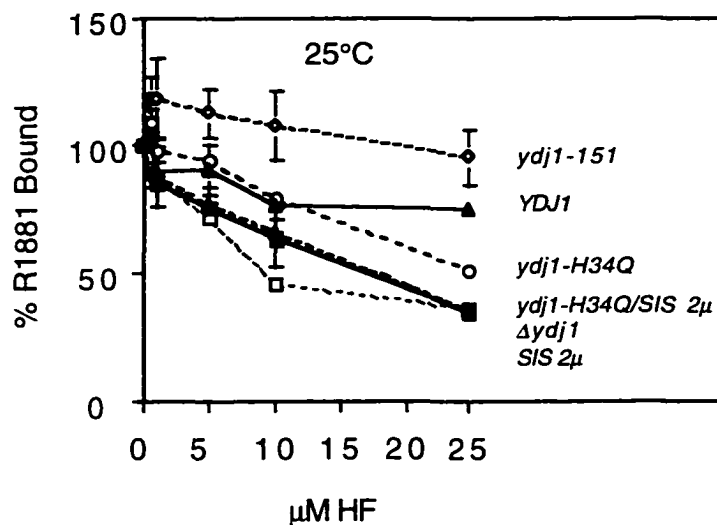


Figure 31. HF competition assay on AR in *ydj1* mutant yeast. AR heterologously expressed in $\Delta ydj1$ mutant cells transformed with pAV7 strain AFYpAV7 (low copy number plasmid containing wild type *YDJ1*) (*YDJ1*; filled triangles), $\Delta ydj1$ mutant strain AFY100AR ($\Delta ydj1$; filled squares), $\Delta ydj1$ cells transformed with *ydj1-H34Q* strain AFY100H34Q (low copy number plasmid containing *ydj1-H34Q* mutant allele) (*ydj1-H34Q*; open circles), $\Delta ydj1$ mutant yeast transformed with *SIS1* strain AFYSIS1 (*SIS1*, 2 μ plasmid) (*SIS1* 2 μ ; open triangles), $\Delta ydj1$ mutant yeast transformed with both *ydj1-H34Q* and *SIS1* strain AFY34Q SIS (*ydj1-H34Q* *SIS1* 2 μ ; open squares) and $\Delta ydj1$ transformed with *ydj1-151* containing plasmid strain AFY100-151 (*ydj1-151*; open diamonds) were incubated at 25°C with increasing amounts of μ M HF in the presence of 100 nM 3H R1881. Results are expressed as a percentage of the 3H R1881 binding in the presence of HF. Results are the mean of three independent experiments.

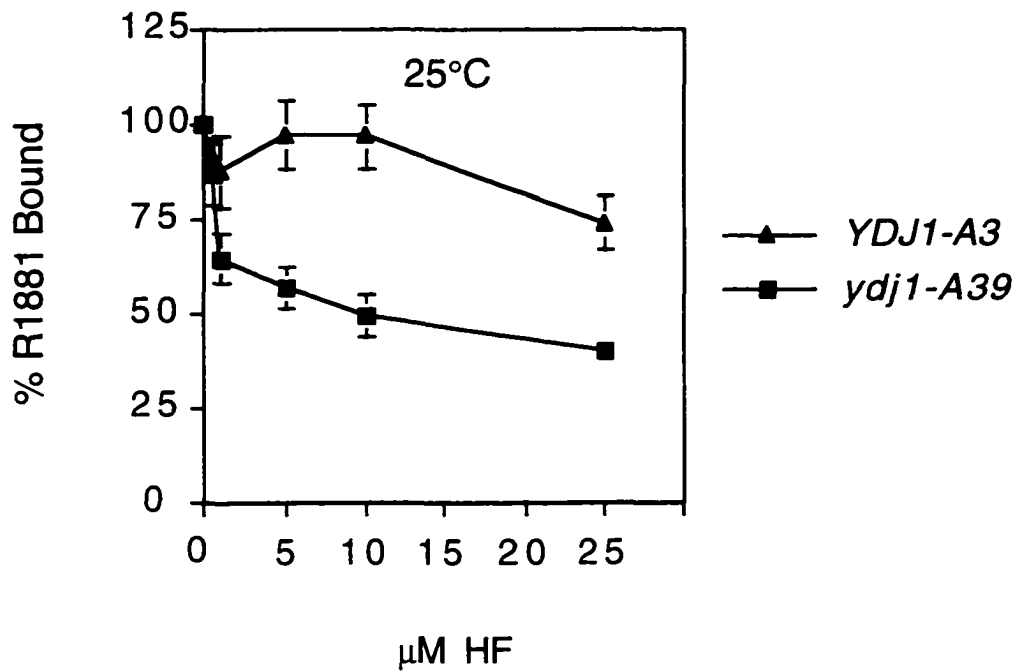


Figure 32. **HF competition assay on AR in wild type and *ydj1-39* mutant yeast.** AR in wild type (*YDJ1*; closed triangles) and *ydj1-39* (*ydj1-A39*; closed squares) mutant cells were incubated at 25°C with increasing amounts of $\mu\text{M HF}$ in the presence of 100 nM 3H R1881. Results are expressed as a percentage of the 3H R1881 binding in the presence of HF. Results are the mean of three independent experiments.

(open diamonds). *ydj1-H34Q* mutant was able to partially complement the HF competition defect (Figure 31-open circles). In the presence of the *ydj1-H34Q* allele, 25 μ M HF was able to compete R1881 binding to 50% of its original value, compared 80% for the wild type and about 30% for the other *ydj1* strains. Likewise, the *ydj1-39* or *SIS1* mutant was unable to support wild type HF competition, (40 and 35% increase respectively) (Figure 32 and 31, respectively). When these experiments were performed with *ydj1-H34Q* and *SIS1* at 37°C a similar phenotype was observed (35-40% competition at 25 μ M HF) (Figure 29B). This indicates that both the J domain is necessary, but not sufficient for wild type HF competition. Likewise, both *ydj1-H34Q* and *SIS1* (open squares) expressed in trans were unable to complement the HF competition defect seen in the Δ *ydj1* strain (Figure 31). Also similar to the results for direct hormone binding, yeast containing the *ydj1-G315D* allele showed no alteration in HF competition when compared to that of the isogenic wild type strain. HF was only able to decrease R1881 binding to the AR to 70-80% of its original value in both the *ydj1-G315D* and isogenic wild type strains (Figure 33). These results indicate that some other domain of Ydj1 is required in addition to the J domain for wild type HF competition.

In order to determine whether these ligand binding defects manifests themselves in a downstream transactivation defect, *lacZ* reporter gene assays were performed on *ydj1* mutant yeast which were heterologously expressing AR. Expression of *ydj1-H34Q* was able to partially complement the transactivation defect seen in the Δ *ydj1* strain. When Δ *ydj1* yeast were

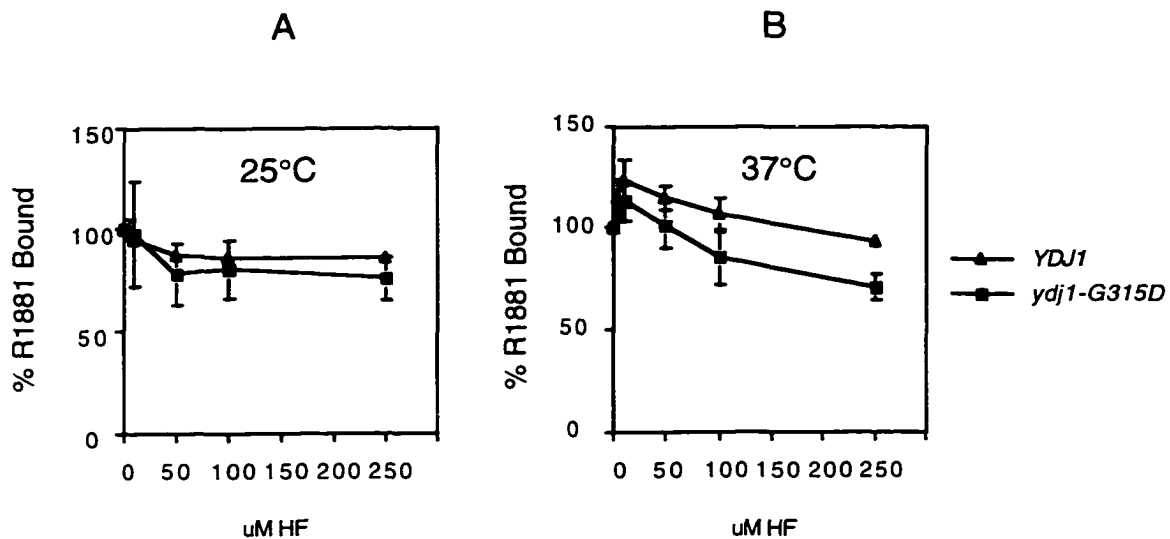


Figure 33. **HF competition assay on AR in wild type and *ydj1-G315D* mutant yeast.** AR in wild type (*YDJ1*; closed triangles) and *ydj1-G315D* (*ydj1-G315D*, closed squares) mutant cells were incubated at 25°C (A) and 37°C (B) with increasing amounts of μM HF in the presence of 100 nM 3H R1881. Results are expressed as a percentage of the 3H R1881 binding in the presence of HF. Results are the mean of three independent experiments.

transformed with a plasmid containing the *ydj1-H34Q* allele, there was a 9-fold increase in DHT induced *lacZ* gene expression (Figure 34-lane 8). Likewise, overexpression of *SIS1* was able to partially complement the transactivation defect seen in the $\Delta ydj1$ strain. As seen in Figure 34, overexpression of *SIS1* (lane 6) led to a 4-fold increase in DHT induced *lacZ* gene expression. Expression of *ydj1-151* was only able to increase hormone dependent transactivation less than one fold over that of the $\Delta ydj1$, even though it is essentially wild type for hormone binding. This indicates that Ydj1p may play a dual role in AR activation, one role in hormone binding and one independent of hormone binding.

[3] Human Hdj2p, but not Hsj1 or Hdj1, Fully Complements the Ligand Binding Defect in the $\Delta ydj1$ Strain

Steroid hormone receptors such as the AR are not normally expressed in yeast, but are seen in higher eukaryotes including humans. In order to determine if higher eukaryote J proteins are capable of interacting with AR produced in the yeast, direct hormone binding and ligand competition assays were performed on wild type, $\Delta ydj1$ and $\Delta ydj1$ transformed with various human J homologues which were heterologously expressing the human AR. The human homologues tested were Hdj1, Hdj2 and Hsj1. Of these J homologues only Hdj2 (Type 1 J protein) contains the zinc finger domain and farnesylation signal as does Ydj1. Hdj1 and Hsj1 are Type 2 J proteins and contain only the J G/F domain in addition to the carboxy terminal domain (See for review

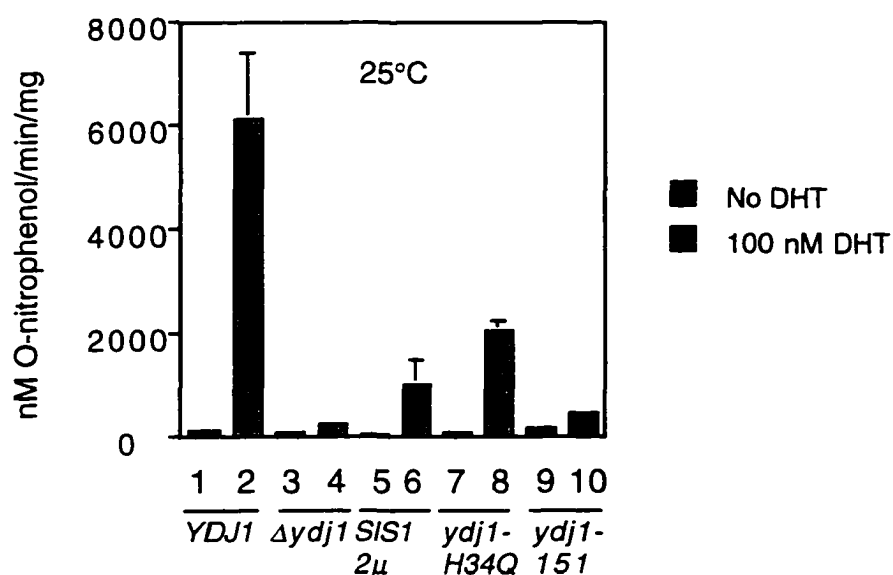


Figure 34. **Hormone dependent transactivation by AR in wild type and *ydj 1* mutant strains.** β -Galactosidase activity in wild type strain MYY290AR (*YDJ1*; lanes 1 and 2), $\Delta ydj 1$ strain MYY100AR ($\Delta ydj 1$; lanes 3 and 4) mutant strains, $\Delta ydj 1$ cells transformed with *ydj 1-H34Q* strain AFY100H34Q (low copy number plasmid containing *ydj 1-H34Q* mutant allele) (*ydj 1-H34Q* lanes 7 and 8), $\Delta ydj 1$ mutant yeast transformed with *SIS1* strain AFYSIS1 (*SIS1*, 2 μ plasmid; lanes 5 and 6) (*SIS1* 2 μ), and $\Delta ydj 1$ transformed with *ydj 1-151* containing plasmid strain AFY100-151 (*ydj 1-151*; lanes 9 and 10) containing AR was measured in the presence (gray bars) or absence (black bars) of 100 nM DHT. Results are the mean of three independent experiments.

Cheetham and Caplan, 1997). All three human homologues were able to complement the $\Delta ydj1$ growth defect at 25°C, but only Hdj2 was capable of complementing the temperature sensitive growth phenotype of the $\Delta ydj1$ strain at 37°C (Fig. 35). The results of the direct hormone binding assays are seen in Fig. 36. The only human J homologue that was able to complement the hormone binding defect seen in the $\Delta ydj1$ strain was Hdj2, the human Ydj1 homologue, even though receptor levels were similar in all strains as determined by Western blot analysis (Figure 37). Expression of Hdj2 was able to increase R1881 binding to the AR to levels comparable to the $\Delta ydj1$ co-expressing the wild type gene (Figure 36-open triangles). As seen in Fig. 35, expression of Hdj1p (open squares) or Hsj1p (crosses) was only able to increase R1881 slightly above that of the $\Delta ydj1$ strain.

In order to determine if any human homologues were capable of complementing the HF competition defect, ligand competition assays were performed on the wild type, $\Delta ydj1$ and $\Delta ydj1$ strains that had been transformed with human J homologues. Similarly, Hdj2 was the only human J homologue able to revert HF competition back to that of the wild type. As demonstrated in Fig. 38, in the Hdj2p (open triangles) expressing strain 25 uM HF was able to reduce R1881 binding to approximately 80% of the original value, compared to a reduction to 85-90% for the galYDJ1 (closed triangles) and 30-35% for the $\Delta ydj1$ strain (closed squares). In contrast, expression of Hdj1 (Figure 38-open squares) or Hsj1 (Figure 38-crosses) was unable to complement the HF competition defect in the $\Delta ydj1$ strain. In the Hdj1p and Hsj1p

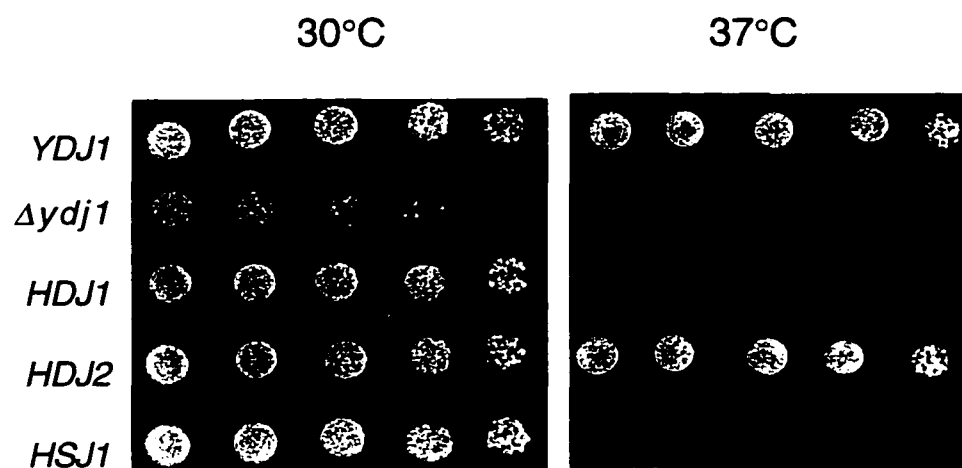


Figure 35. Growth characteristics of the human J homologues in $\Delta ydj1$ mutant yeast. Serial dilutions of yeast cells and growth at 30°C and 37°C in galactose. Wild type strain MYY290AR (*YDJ1*), $\Delta ydj1$ strain AFY100AR ($\Delta ydj1$), *HDJ1* under the control of a galactose inducible promoter in $\Delta ydj1$ strain AFYHDJ1 (*HDJ1*), *HDJ2* under the control of a galactose inducible promoter in $\Delta ydj1$ strain AFYHDJ2 (*HDJ2*), and *HSJ1* under the control of a galactose inducible promoter in $\Delta ydj1$ strain AFYHSJ1 (*HSJ1*).

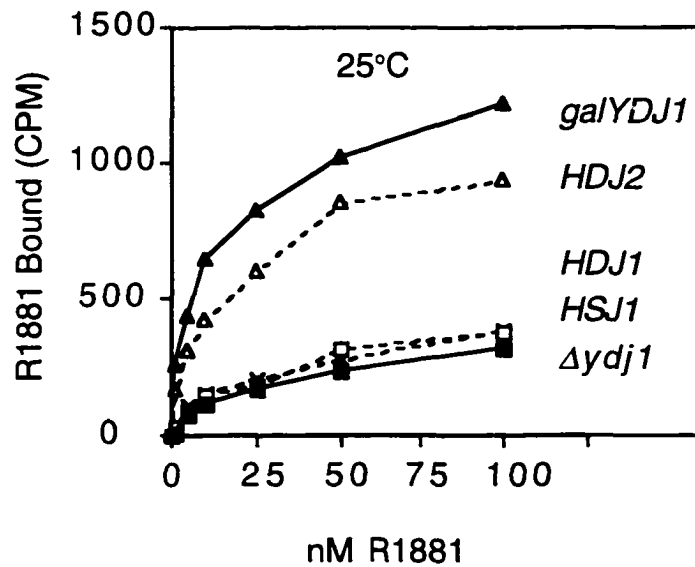


Figure 36. **Hormone binding to AR in $\Delta ydj1$ mutant yeast transformed with Type 1 and 2 human J homologues.** Titration of ^3H -R1881 in $\Delta ydj1$ mutant yeast ($\Delta ydj1$; closed squares), $\Delta ydj1$ wild type transformed with galYDJ1 strain AFYgalYDJ1 (*YDJ1* coding sequence under the control of a galactose inducible promoter) (galYDJ1; closed triangles), $\Delta ydj1$ wild type transformed with HDJ1 strain AFYHDJ1 (pRS315 containing HDJ1 coding sequence under the control of a galactose inducible promoter) (HDJ1; open squares), $\Delta ydj1$ wild type transformed with HDJ2 strain AFYHDJ2 (pRS315 containing HDJ2 coding sequence under the control of a galactose inducible promoter) (HDJ2; open triangles) and $\Delta ydj1$ wild type transformed with HSJ1 strain AFYHSJ1 (pRS315 containing HSJ1 coding sequence under the control of a galactose inducible promoter) (HSJ1; solid crosses) mutant yeast cells heterologously expressing AR were tested for R1881 binding at 25°C. Results are the mean of three independent experiments.



Figure 37. **Western blot analysis of AR with human J homologues.** (top panel; arrow denotes location of AR and star denotes breakdown product or AR), Ydj 1 (second panel; arrow denotes location of Ydj 1). Analysis was performed on whole cell extracts of *YDJ1* strain MYY290AR (*YDJ1*; lane 1), $\Delta ydj 1$ strain AFY100AR ($\Delta ydj 1$; lane 2), *HDJ1* in $\Delta ydj 1$ strain AFYHDJ1 (*HDJ1*; lane 3), *HDJ2* in $\Delta ydj 1$ strain AFYHDJ2 (*HDJ2*, lane 4) and *HSJ1* in $\Delta ydj 1$ strain AFYHSJ1 (*HSJ1*, lane 5) yeast expressing AR. Molecular weight standards are shown in kDa.

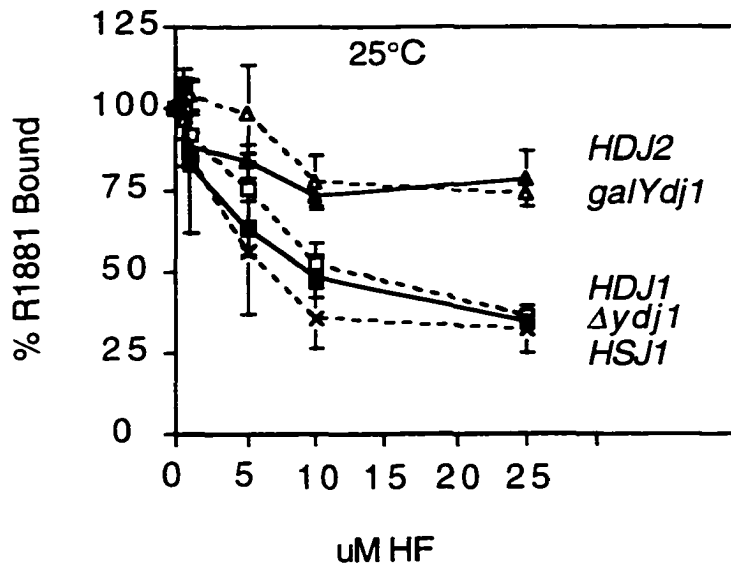


Figure 38. HF competition assay on AR in $\Delta ydj 1$ mutant yeast transformed with Type 1 and 2 human J homologues.

Heterologously expressed AR in $\Delta ydj 1$ mutant yeast strain AFY100AR ($\Delta ydj 1$; closed squares), $\Delta ydj 1$ wild type transformed with galYDJ1 strain AFYgalYDJ1 (*YDJ1* coding sequence under the control of a galactose inducible promoter) (galYDJ1; closed triangles), $\Delta ydj 1$ yeast transformed with *HDJ1* strain AFYHDJ1 (pRS315 containing *HDJ1* coding sequence under the control of a galactose inducible promoter) (*HDJ1*; open squares), $\Delta ydj 1$ wild type transformed with *HDJ2* strain AFYHDJ2 (pRS315 containing *HDJ2* coding sequence under the control of a galactose inducible promoter) (*HDJ2*; open triangles) and $\Delta ydj 1$ wild type transformed with *HSJ1* strain AFYHSJ1 (pRS315 containing *HSJ1* coding sequence under the control of a galactose inducible promoter) (*HSJ1*; solid crosses) mutant yeast cells heterologously expressing AR were incubated at 25°C with increasing amounts of μM HF in the presence of 100 nM 3H R1881. Results are expressed as a percentage of the 3H R1881 binding in the presence of HF. Results are the mean of three independent experiments.

expressing strains, 25 μ M HF reduced R1881 binding to approximately 30-40% of its original value, compared to about 35% for the mutant and 85-90% for the wild type strains.

In order to determine whether this hormone binding manifests itself in a downstream transactivation defect, lacZ reporter gene assays were performed on $\Delta ydj1$ yeast containing human homologues of Ydj1 which were heterologously expressing AR. As with both hormone binding and HF competition, expression of *HDJ2* was able to fully complement the decrease seen in hormone induced lacZ gene expression seen in the $\Delta ydj1$ yeast (Figure 39). As seen in Figure 39, DHT induced lacZ gene expression was virtually identical in both wild type and $\Delta ydj1$ yeast transformed with *HDJ2*. Expression of *HDJ1* or *HSJ1* were unable to complement the transactivation defect seen in the $\Delta ydj1$ strain. As seen in Figure 39, DHT induced lacZ gene expression was virtually identical in both $\Delta ydj1$ and $\Delta ydj1$ yeast transformed with either *HDJ1* (lane 6) or *HSJ1* (lane 10).

[4] Hormone Binding to the ER is Decreased in the Absence of Ydj1p

Previous studies suggest that ER signaling is defective in the absence of functional Ydj1p (Kimura et al., 1996). In this study, there was a deregulation of ER activation in the *ydj1-G315D* mutant, even in the absence of hormone the receptor was able to transactivate a target gene. In order to confirm this transactivation defect, lacZ reporter gene assays were performed on wild type

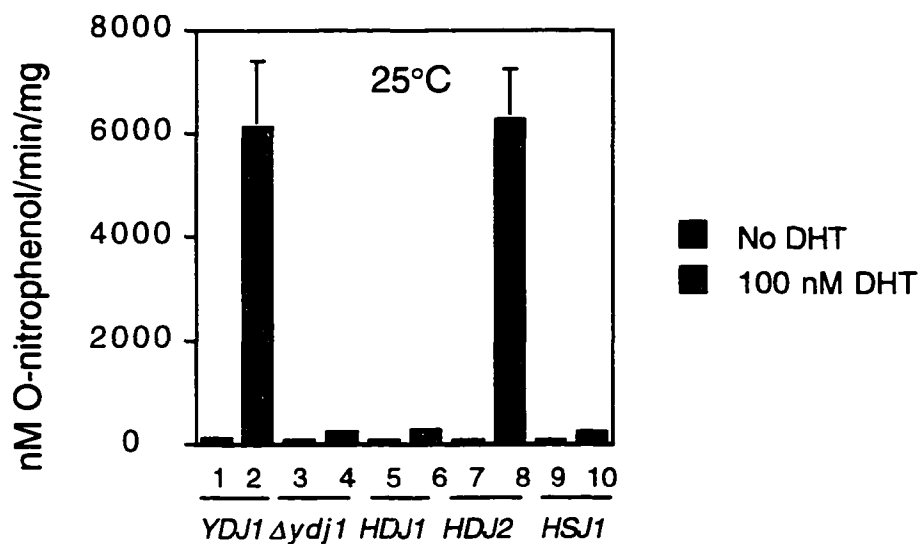


Figure 39. **Hormone dependent transactivation by AR in $\Delta ydj 1$ mutant yeast transformed with Type 1 and 2 human J homologues.** β -Galactosidase activity in wild type strain MMY290AR (*YDJ1*; lanes 1 and 2), $\Delta ydj 1$ strain AFY100AR ($\Delta ydj 1$; lanes 3 and 4), $\Delta ydj 1$ wild type transformed with *HDJ1* strain AFYHDJ1 (pRS315 containing *HDJ1* coding sequence under the control of a galactose inducible promoter) (*HDJ1*; lanes 5 and 6), $\Delta ydj 1$ wild type transformed with *HDJ2* strain AFYHDJ2 (pRS315 containing *HDJ2* coding sequence under the control of a galactose inducible promoter) (*HDJ2*; lanes 7 and 8) and $\Delta ydj 1$ wild type transformed with *HSJ1* strain AFYHSJ1 (pRS315 containing *HSJ1* coding sequence under the control of a galactose inducible promoter) (*HSJ1*; lanes 9 and 10) mutant yeast cells heterologously expressing AR was measured at 25°C in the presence (gray bars) or absence (black bars) of 100 nM DHT. Results are the mean of three independent experiments.

and $\Delta ydj1$ mutant yeast that heterologously expressed the ER in addition to containing a lacZ reporter gene under the control of an estrogen response element. In contrast to previous studies with *ydj1-G315D*, $\Delta ydj1$ yeast were significantly decreased in their ability to transactivate upon hormone binding when compared to the wild type strain (Figure 40). There was essentially no induction of lacZ gene expression upon incubation with E2 in the $\Delta ydj1$ yeast strain.

In order to determine whether this transactivation defect seen in the absence of functional Ydj1p was in part due to an alteration in hormone binding, direct hormone binding and 4-OHT competition assays were performed on wild type and $\Delta ydj1$ yeast which were heterologously expressing the human ER. As shown in Fig. 41A, DES binding to the ER in the $\Delta ydj1$ strain was reduced by approximately 4-fold compared to the wild type strain at 100 nM DES, although both wild type and mutant strains contained similar amounts of ER (Figure 41B). This indicates that Ydj1 is required for wild type hormone binding to the ER. Interestingly, while 4-OHT could compete for hormone binding in the wild type strain, it had no effect (neither competition nor potentiation) on DES binding to the ER in the $\Delta ydj1$ strain (Figure 41A). Likewise as expected, the ER hormone binding defect was fully complemented when the wild type *YDJ1* gene was added back to the $\Delta ydj1$ strain (Figure 41A-lanes 3 and 4). This indicates that Ydj1p is required for wild type hormone binding to the ER.

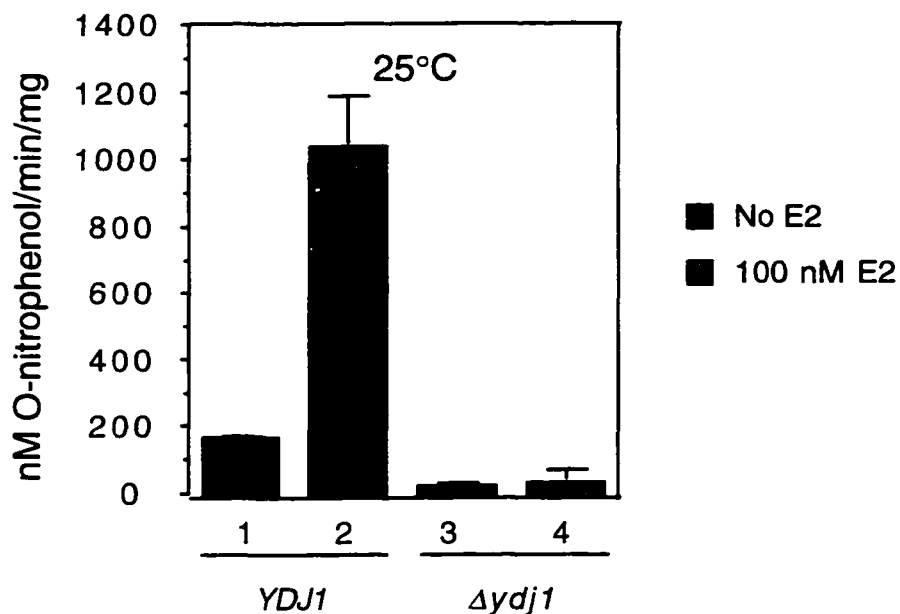


Figure 40. **Hormone dependent transactivation by ER in wild type and $\Delta ydj 1$ mutant yeast.** β -Galactosidase activity in wild type strain W3031ER(*YDJ1*; lanes 1 and 2), $\Delta ydj 1$ strain ACY95ER($\Delta ydj 1$; lanes 3 and 4) mutant yeast cells heterologously expressing ER was measured at 25°C in the presence (gray bars) or absence (black bars) of 100 nM E2. Results are the mean of three independent experiments

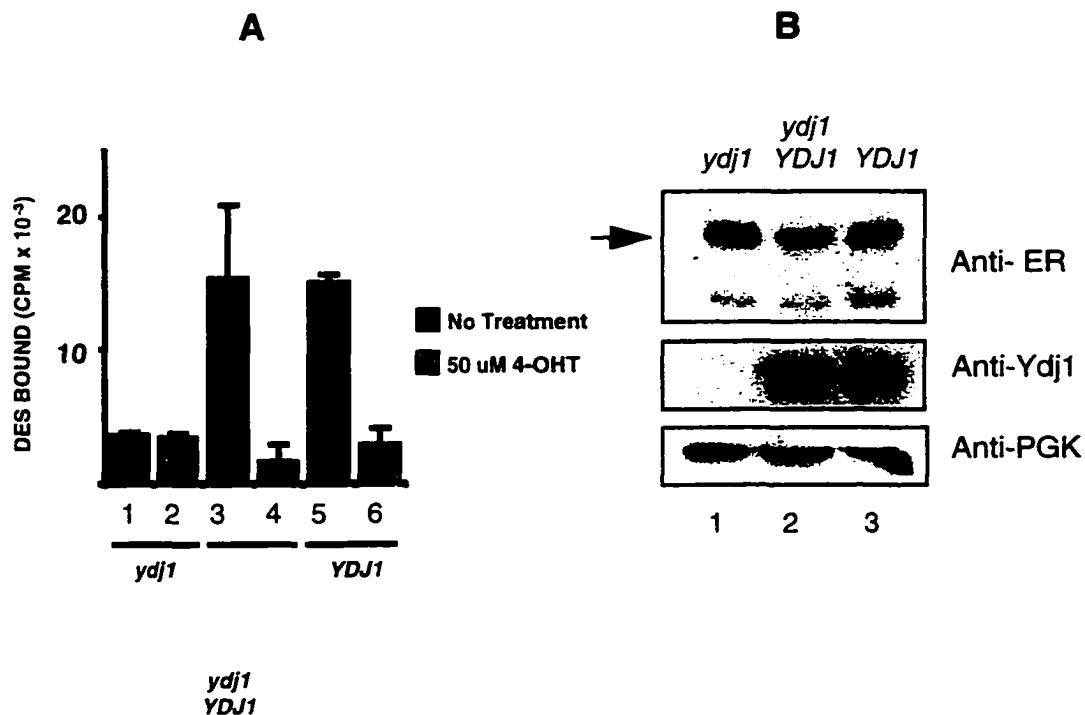


Figure 41. **4-OHT competition assays on *YDJ1* and $\Delta ydj1$ yeast strains.** (A) Wild type strain W3031ER (*YDJ1*; lanes 5 and 6), *ydj1* null strain ACY95ER ($\Delta ydj1$; lanes 1 and 2) and *ydj1* null covered by wild type *YDJ1* on a plasmid strain ACY95pAV7 ($\Delta ydj1$ *YDJ1*) yeast heterologously expressing ER were incubated with (+) or without (-) 50 μ M 4-OHT in the presence of 100 nM [³H] DES. Results are expressed as DES bound (cpm x 10⁻²). Results are the mean of three independent experiments. (B) Western blot analysis of ER (top panel; arrow denotes location of ER and star denotes breakdown product of ER) and Ydj1 (middle panel; arrow denotes location of Ydj1). Analysis was performed on whole cell extracts of *ydj1* null strain ACY95ER ($\Delta ydj1$; lane 1), *ydj1* null covered by a plasmid containing wild type *YDJ1* on a plasmid strain ACY95pAV7 ($\Delta ydj1$ *YDJ1*; lane 2) and wild type strain W3031ER (WT; lane 3) yeast expressing ER. Molecular weight standards are shown in kDa. Probing with antisera specific for Phosphoglycerate kinase was used as a loading control (PGK; lower panel; arrow denotes location of PGK).

Discussion

In this study it was shown that mutation or deletion of Ydj1p affects the ability of both the AR and ER to bind ligand and subsequently transactivate target genes. First, deletion of Ydj1p leads to a decrease in the ability of AR and ER to bind hormone (Figure 24 and 41). In the $\Delta ydj1$ strain, AR was unable to bind the synthetic androgen R1881 to the same extent as in the isogenic wild type strain. Likewise, ER was unable to bind DES at wild type levels in the $\Delta ydj1$ strain. Second, the absence of Ydj1p affected the ability of HF to compete for hormone binding to the AR and the ability of the drug 4-OHT to compete for DES binding to the ER. In the $\Delta ydj1$ mutant strain, HF acted as a more potent competitor of R1881 binding to the AR (Figure 26), whereas, in the ER expressing strain, 4-OHT was unable to compete for DES binding (Figure 41A). In addition these hormone binding defects seen with the AR could be partially or completely complemented by various Ydj1 mutants and yeast or human homologues. Both *ydj1-H34Q* (J domain mutant) and the yeast homologue *SIS1* (does not contain a zinc finger domain or farnesylation signal) were able to partially complement the hormone binding defect (Figure 27). Likewise, the human Ydj1 homologue, Hdj2 was able to fully complement both the growth (Figure 35) and hormone binding defects (Figure 36 and 38). This suggests that Ydj1 plays an important role in hormone binding of both the AR and ER and since the J domain is required for this function it may be suggested that Ydj1 is acting via Hsp70.

Ydj1 plays an important role in hormone dependent signaling of the AR (Caplan et al., 1995) via its HBD, suggesting that the defect is a hormone binding defect. Dittmar et al. recently demonstrated using an *in vitro* reconstitution system that GR is unable to bind hormone upon depletion of hsp40 (J protein) and this hormone binding defect can be reversed upon the addition of Ydj1 protein to the extract (1998). Likewise, the results presented here are consistent with a role for Ydj1 in maintaining the AR in the hormone binding state *in vivo*, since in the absence of Ydj1 AR has a decreased ability to bind R1881 (Figure 24). Likewise, HF acts as a more potent competitor of R1881 binding to the AR in the absence of Ydj1p, as it did in the absence of functional Hsp90 (Figure 26). Both of these results suggest that Ydj1 is required for AR hormone binding *in vivo*.

Ydj1 can be broken up into three major domains; 1) J G/F domain which is responsible for increasing the normal low level of ATPase of Hsp70 (Liberek et. al., 1991), 2) zinc finger domain which has chaperoning function of its own and is able to prevent the aggregation of proteins (Lu and Cyr, 1997; Szabo et. al., 1995), and 3) carboxy-terminal domain which also has chaperoning function of its own and is able to prevent the aggregation of proteins (Lu and Cyr, 1997). Ydj1 may be functioning via Hsp70 in AR hormone binding and transactivation, since upon depletion of Hsp70 the GR is unable to bind hormone *in vitro*. The results presented here are consistent with the idea that Ydj1 is acting at least in part via Hsp70 in AR signaling, since *ydj1-H34Q* which lacks a functional J domain is able to partially complement both the hormone

binding (Figure 27 and 29) and ligand competition (Figure 29 and 31) phenotype seen in the $\Delta ydj1$ strain. This suggests that the J domain is necessary, but not sufficient for wild type hormone binding. These results also suggests that the some other domain or combination of domains is required in addition to the J domain for wild type hormone binding. Interestingly, AR in the carboxy-terminal mutant *ydj1-G315D* demonstrated no alteration in hormone binding (Figure 30) or ligand competition (Figure 33), suggesting that this region is not essential for hormone binding. Similar to the results shown for the *ydj1-H34Q* mutant, overexpression of *SIS1* in the $\Delta ydj1$ strain was able to partially complement the hormone binding defect (Figure 27 and 29), but was unable to complement the ligand competition defect (Figure 29 and 31). Taken together these data indirectly suggest that either the zinc finger domain and/or farnesylation is also required for hormone binding to the AR, since overexpression of the J/GF domain of *SIS1* is able to only partially complement the ligand binding defects. However, this may be in part due to the fact that the J/GF domain of *SIS1* is not identical to that of *Ydj1*. Interestingly, expression of both domain the J/GF and zinc finger domain/farnesylation in trans was not able to further complement the hormone binding (Figure 27) or ligand competition defect (Figure 31). So one could speculate that these regions of *Ydj1* must be together in three-dimensional space in order to coordinate their activities. Likewise, hormone dependent transactivation was only partially complemented by expression of both *ydj1-H34Q* and *SIS1* 2 μ . None of these defects could be accounted for by

decrease in level or stability of the AR, since receptor levels were similar as determined by Western blot analysis. Since previous studies have demonstrated that the J domain functions in association with Hsp70, one would speculate that Ydj1 is acting at least partially via Hsp70 in hormone binding to the AR. Although, it can not be discounted that the J domain may have additional functions independent of the Hsp70 reaction cycle.

In its native environment, the human AR does not normally interact with yeast molecular chaperones, but rather it would associate with human homologues of these same chaperones. Since the chaperone machinery is conserved functionally from yeast to higher eukaryotes (Chang and Lindquist, 1994; Stancato et. al., 1996), it would be expected that the appropriate human J homologue may be able to complement the hormone binding defect seen in the $\Delta ydj1$ strain. Based on the previously described analysis of yeast Ydj1 mutants and homologue earlier in this chapter, one might postulate that a Type 1 J protein would be able to complement the AR signaling defect in the $\Delta ydj1$ strain. Consistent with this notion, neither of the Type 2 J proteins, Hdj1 and Hsj1, tested were able to complement either the hormone binding (Figure 36) or ligand competition (Figure 38) defect seen in the $\Delta ydj1$ strain. The only human J homologue that was able to complement the binding and ligand competition defect seen in the mutant was the Ydj1 homologue, Hdj2 (Figure 36 and 38). Hdj2 was able to fully complement hormone binding defects (Figure 36 and 38) as well as the temperature sensitive growth defect of the $\Delta ydj1$ strain (Figure 35). Likewise, expression of Hdj2 was also able to fully

complement the transactivation defect seen in the $\Delta ydj1$ strain (Figure 39). This is consistent with the idea that both the J/GF domain in combination with either the zinc finger domain and/or farnesylation are important for hormone binding to the AR. Thus it is likely that J proteins are functioning at least partially via Hsp70, since the J domain aids in Hsp70 function. This data also suggests that in its native environment the AR may require the action of Hdj2 for proper steroid receptor function.

It has also been suggested that Ydj1 plays a vital role in ER signaling (Caplan et. al., 1995; Kimura et. al., 1995). This previous study demonstrated a deregulation of hormone dependent transactivation by the ER in a *ydj1* mutant strain. In the *ydj1-G315D* strain, there were increased levels of hormone independent activity. In contrast, results presented here have not shown this same deregulation of hormone dependent transactivation. The ER was decreased in its ability to transactivate upon hormone binding, in the absence of Ydj1 (Figure 40). Likewise, this transactivation defect was at least in part caused by a decrease in the ability of the ER to bind hormone. Similar to AR, there was also a concurrent alteration in the ability of 4-OHT to compete for hormone binding, again suggesting that ligand binding is defective in the absence of Ydj1p. In the $\Delta ydj1$ strain, 4-OHT was neither able to compete (as in wild type) nor potentiate (as in the *hsp82* mutant strains) hormone binding to the ER (Figure 41A), suggesting that Ydj1 exerts its effects at a different stage in the maturation of the ER to a hormone binding competent state than that of Hsp90.

The results presented here suggest that Ydj1 or perhaps more correctly its mammalian counterpart Hdj2 is required for both AR and ER signaling. It has been previously demonstrated that the conserved J domain is essential for Ydj1's function in the Hsp70 reaction cycle. So it is likely that Ydj1 or its mammalian counterparts exert their effects via Hsp70 in steroid receptor signaling.

Experimental Methods

Materials

DHT, DES and 4-OHT were obtained from Sigma Chemical Company. Cold R1881 was obtained from NEN. The above compounds were solubilized in ethanol and stored at -20°C. Antisera to ER was a kind gift of Dr. G. Greene. Antisera to AR and Ydj1p was previously described (Fang et. al., 1996; Caplan et. al., 1995). Antisera to yeast phosphoglycerate kinase was a kind gift of Dr. P. Lazarow. ³H DES and ³H R1881 were purchased from American Radiochemical Company and Amersham, respectively. PCY7 (*ydj1-G315D*) and YPH488 (isogenic wild type) were a gift from Dr. Susan Lindquist. Yeast strains A3 (isogenic wild type) and A39(*ydj1* mutant) were a gift from Dr. Frank Boschelli.

Yeast Strains and Growth Conditions

Yeast cells were cultured in selective media (0.67% yeast nitrogen base, 2% glucose or 2% galactose plus the appropriate amino acids) using standard procedures. The *YDJ1* and $\Delta ydj1$ parental strains used for the AR studies were MYY290 (MAT a, leu2, his3, ura3) and MYY405 (MAT a, leu2, his3), respectively (Atencio and Yaffe, 1992). MYY405 was plated on FOA to deselect for the URA3 marker and this strain AFY100 was used as the parental strain for the remainder of this study. Plasmid transformations were performed by the LiAc procedure as described previously (Geitz et al., 1995). Plasmids used in this study were pG1-hAR (human AR; Purvis et al., 1991), pPGKareLacZ (lacZ reporter gene under control of androgen response elements, URA3; Purvis et al., 1991), p2HGPDER/CYC (human ER, 2 μ , HIS3; Kimura et al., 1995), pUC Δ SS-ERE (lacZ reporter gene under control of estrogen response element, URA3; Picard et al., 1990), *ydj1-H34Q* (Tsai and Douglas, 1996), *HDJ1*, *HDJ2*, *HSJ1*, *SIS1*(2 μ , URA3;) , *ydj1-151* (CEN/ARS, LEU2; Caplan et al., 1995), pGALYDJ1(GAL 1 promoter, URA3) , pARH and pARU (Caplan et al., 1995; Fang et al. 1996 and Chapter 1 of this thesis) and pAV7(*YDJ1*, CEN/ARS/LEU2; Caplan et al., 1995). AFY100 (MATa, $\Delta ydj1$, leu2, his3, ura3) transformed with plasmids containing *ydj1-151*, *YDJ1*, *ydj1-H34Q*, *HDJ2* or *HSJ1* was subsequently transformed with pARH and pPGKarelacZC. AFY100 (MATa, $\Delta ydj1$, leu2, his3, ura3) transformed with plasmids containing pgalYDJ1 and SIS1 were subsequently transformed with pARH and pRS315arelacZ. AFY100 (MATa, $\Delta ydj1$, leu2, his3, ura3) previously

transformed with plasmids containing HDJ1 was subsequently transformed with pARU and pRS315arelacZ. PCY7 (*ydj1-G315D*) (Kimura et. al., 1995) and YPH488 (isogenic wild type) (Kimura et. al., 1995) were deselected for pGN795(GR, TRP1; Schena and Yamamoto) and subsequently transformed with pG1-hAR. Likewise, yeast strains A3 and A39 were transformed with pARU.

Plasmid Subcloning

The promoter and open reading frame for *ydj1-H34Q* was subcloned into the vector pRS316(CEN/ARS, LEU2). YQPD was digested with Eag1 and Xho1 and the fragment was gel purified and ligated into similarly digested pRS315. The open reading frame for *HDJ2* was subcloned into the vector pRS315gal (GAL1 promoter, CEN/ARS, LEU2). HDJ2 was digested with BamH1 and Eag1 and the appropriate fragment was gel purified and ligated into similarly digested pRS315gal. Likewise, HSJ1 was digested with BamH1 and the appropriate fragment was gel purified and ligated into similarly digested pRS315gal(GAL1 promoter, CEN/ARS, LEU2). The arelacZ from pPGKarelacZ was subcloned into a LEU2 vector. pPGKarelacZ was digested with HindIII and Sal1 and the appropriate fragment was ligated into similarly cut vector and was termed pRS315arelacZ.

β -Galactosidase Activity Assay

Yeast cells were grown to early log phase ($OD^{600} = 0.2$) and preincubated at either 25°C or 37°C for one hour prior to the addition of either DHT or E2. These cells were then incubated for an additional 2 hours at the same temperature prior to harvesting and the preparation of extracts as previously described (Caplan et. al., 1995) β -galactosidase activity assays were performed as previously described (Caplan et. al., 1995).

Ligand Binding Assays

Yeast cells were grown in selective media containing 2% glucose or 2% galactose to early log phase ($OD^{600} = 0.2$) and 1 ml aliquots were subsequently incubated at either 25°C or 37°C for 30 minutes. Following this preincubation, cells were incubated with either 3H R1881 for the AR or 3H DES for the ER for an additional 1.5 hours at the same temperature. The cells were then washed 3 times with 1 ml of water each and counted in 5 ml of liquid scintillation fluid. Non-specific bound cpm was calculated by subtracting the cpm obtained from samples which were incubated with a 100 fold excess of unlabeled R1881 for the AR or DES for the ER from the samples incubated in the absence of cold R1881 or DES.

Ligand competition assays were also performed with yeast cells which were grown to early log phase ($OD^{600} = 0.2$) as described above. Following a 30 minute preincubation at either 25°C or 37°C, cells were incubated with 100 nM

^3H R1881 for the AR and 100 nM ^3H DES for the ER in the presence or absence of varying concentrations of HF for the AR and 4-OHT for the ER for an additional 1.5 hours at the same temperature. The cells were then washed 3 times with 1 ml of water each and counted in 5 ml of scintillation fluid.

Western Blot Analysis

The levels of AR, ER and Ydj1 were assayed by Western blot analysis using either anti-AR, anti-ER or anti-Ydj1 specific antibodies. Yeast lysates were prepared as previously described (Caplan et. al., 1995). Lysates (10 μg total protein) were resolved by SDS-PAGE and the proteins in the gel were subsequently transferred to nitrocellulose (0.45 μm , MSI). Filters were briefly rinsed with TTBS and blocked overnight at room temperature with TTBS containing 5% non-fat dry milk. Filters were subsequently incubated with antibodies specific for the AR, ER or Ydj1 (antibodies were diluted in antibody dilution buffer, 1x PBS, 3% bovine serum albumin, 0.05% Tween 20 and 0.1% thimerosal (1:1000 for anti-Ydj1 and anti-AR and 1:2000 for anti-ER) for either 1 hour (anti-Ydj1 or anti-AR) or 4 hours (anti-ER). Filters were washed three times for 10 minutes each in TTBS. Filters were then incubated with secondary antibody (HRP conjugated goat anti-rat IgG, diluted 1:2000 in antibody dilution buffer for anti-ER; and HRP conjugated goat anti-mouse IgG, diluted 1:10,000 in antibody dilution buffer for anti-AR and anti-Ydj1) for 1 hour and subsequently washed three times for 10 minutes each in TTBS. Filters were treated with the chemiluminescence reagent (Pierce) and exposed to X-ray

film. An identical filter was probed with anti-PGK (1:300,000 in antibody dilution buffer) to control for loading differences. The secondary antibody for the anti-PGK was HRP conjugated goat anti-rabbit IgG (1:10,000 in antibody dilution buffer). Washes and incubation times were identical to that for anti-Ydj1, anti-AR and anti-ER.

CHAPTER IV

CHARACTERIZATION OF THE ROLE OF CDC37 IN ANDROGEN, ESTROGEN AND GLUCOCORTICOID RECEPTOR ACTION

Introduction

The mammalian p50 protein is known to interact with Hsp90 in the v-src activation complex (Whitelaw et al., 1991, Brugge, 1986). In addition, both p50 and Hsp90 were also identified as vital components of the signal transduction pathway originating from the Drosophila Sevenless receptor which is involved in eye development (Cutforth and Rubin, 1994). Recently the essential yeast cell division cycle gene CDC37 was identified as an orthologue of mammalian p50 (Reed, 1980). Both mammalian p50 and yeast CDC37 are involved in the stabilization of cyclin dependent kinases (Gerber et. al., 1995; Stepanova et. al., 1996; Dai et. al., 1996) Yeast CDC37 plays an important role in the stabilization of Cdc28 (Gerber et. al., 1995). In the case of the mammalian p50, it is involved in the stabilization of CDK4 (Stepanova et. al., 1996), suggesting a conservation of function from higher to lower eukaryotes. Likewise, recent genetic studies with yeast demonstrate that mutations in CDC37 cause a reduction in the v-src activity that is normally lethal in the yeast (Florio et. al., 1994; Brugge et. al., 1987; Jove and Hanafusa, 1987; Kornbluth et. al., 1987; Boschelli et. al., 1993; Xu and Lindquist, 1993), giving further evidence for conservation, supporting the involvement of Cdc37 in kinase action. However to date, p50/CDC37 has not been seen in physical association with steroid hormone aporeceptor complex (Nair et al, 1997; Whitelaw et al., 1991; Stancato et al., 1993), suggesting that p50/CDC37 might be specific for protein kinase signal transduction pathways. However, the events that lead to formation of the Hsp90 complex with v-src and steroid

receptors are indeed quite similar, suggesting that p50/CDC37 might play a role in receptor activation. In order to address the question of the role of p50/CDC37 in steroid receptor activation, it was tested as to whether AR, ER and GR signaling was affected by a mutation in the yeast CDC37.

Results

A temperature sensitive *cdc37* mutant strain was used to study hormone binding and subsequent hormone dependent transactivation by heterologously expressed AR, ER and GR, in order to determine whether Cdc37p is required for steroid hormone receptor function. The mutant used in this study is termed *cdc37-34* and was previously described as being a suppressor of *v-src* lethality in *Saccharomyces cerevisiae* (Dey et al., 1996). This mutant grows slowly at 25°C (the permissive temperature) and is inviable at 37°C (the restrictive temperature) (Figure 42). Sequence analysis of this allele revealed a single base pair substitution (C to T) at nucleotide 41 in the open reading frame (sequence analysis performed by Dr. Robert Donnelly, UNJ). This point mutation resulted in the change converting residue 14 from a serine to a leucine. This residue is one of two serines phosphorylated by casein kinase II *in vivo* and if both of these residues are converted to alanine Cdc37p has reduced function (personal communication from Dr. Glover). Both of these phosphorylated serines are in the highly conserved region of Cdc37p which is residue 1-38. This region is 50% identical and 70% conserved from yeast to human (Figure 43), suggesting a conservation of function.

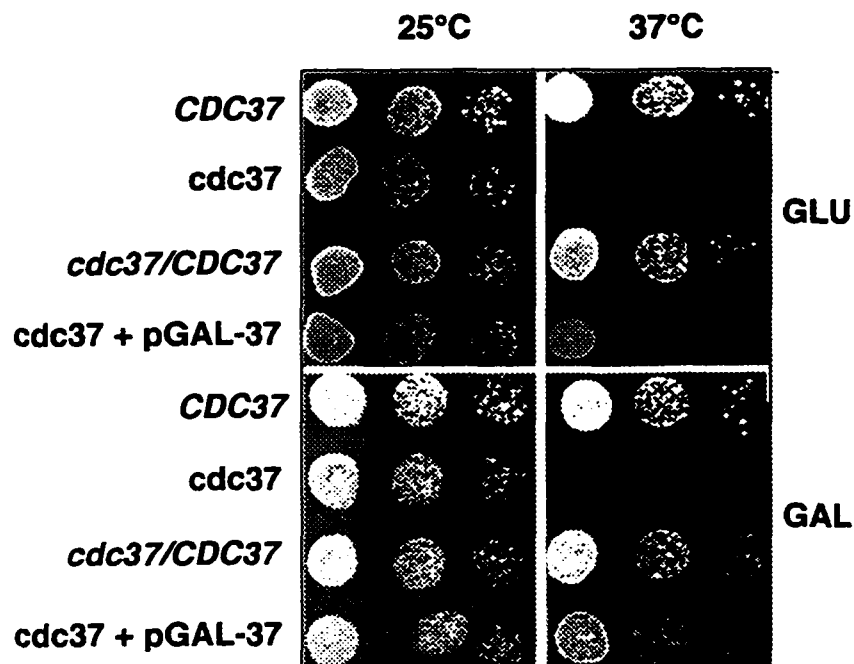


Figure 42. **Growth characteristics of the *cdc37-34* mutant strain.** Serial dilutions of yeast cells and growth at 25°C and 37°C. Wild type strain AFY17 (*CDC37*), *cdc37* strain AFY14 (*cdc37-34*), *cdc37-34* with pRSS2 strain AFY16 (low copy number plasmid with *CDC37* (*cdc37/CDC37*), *cdc37-34* with multicopy plasmid containing *CDC37* under galactose promoter control strain AFY18 (*cdc37/pGAL-37*).

Y CDC37	D	Y	S	K	W	D	K	I	E	L	S	D	D	S	D	V	E	V
Y cdc37-34	*	*	*	*	*	*	*	*	*	*	L	*	*	*	*	*	*	*
D CDC37	*	*	*	*	*	K	N	*	*	I	*	*	*	E	*	-	D	T
H CDC37	*	*	*	V	*	*	H	*	*	V	*	*	*	E	*	-	*	T
M CDC37	*	*	*	V	*	*	H	*	*	V	*	*	*	E	*	-	*	T

Figure 43. **Cdc37 protein sequences.** Comparison of the N-terminal region of p50/Cdc37 proteins in single letter amino acid code from *S. cerevisiae* (Y), *Drosophila melanogaster* (D), human (H), and mouse (M). Conserved residues are denoted by a star. The position of the S14L mutation in *cdc37-34* is shown by an arrow.

[1] Cdc37p Functions in the Activation of the AR

It has been suggested that p50/Cdc37 only functions in association with Hsp90 in the regulation of protein kinases such as v-src, Sevenless and cyclin dependent kinases (CDK4 and Cdc28) (Brugge et. al., 1987; Cutworth and Rubin, 1996; Stepanova et. al., 1996; Gerber et. al., 1995; Whitelaw et. al., 1991), since it is not seen in stable physical association with Hsp90 in the aporeceptor complex. In order to answer the question is Cdc37p required for receptor activation, the *cdc37-34* mutant and an isogenic wild type were assayed for DHT dependent lacZ expression driven by heterologously expressed AR at both the permissive (25°C) and non-permissive (37°C) temperatures. As seen in Figure 44, when assays were performed with the wild type strain using 100 nM DHT there was a 22 fold induction of lacZ activity over the background at 25°C (Figure 44A-lane 2) and a 79 fold induction for the same at 37°C (Figure 44B-lane2). In contrast, when these assays were performed on the *cdc37-34* mutant strain there was only a 4 to 5 fold induction with DHT at 25°C (Figure 44A-lane 4) and less than a 1 fold induction at 37°C (Figure 44B-lane 4). Comparing the wild type to the *cdc37-34* mutant, there was a 5 fold decrease in DHT induced activity at 25 °C and almost 80 fold decrease at 37°C. This transactivation defect was not caused by decreased stability or expression of the AR, since AR levels as determined by Western blot are similar in both the *cdc37-34* mutant and wild type extracts (Figure 45). Transactivation by the AR is therefore defective in the *cdc37-34* mutant strain at both 25° and 37°C, however, the phenotype is much more dramatic at 37°C.

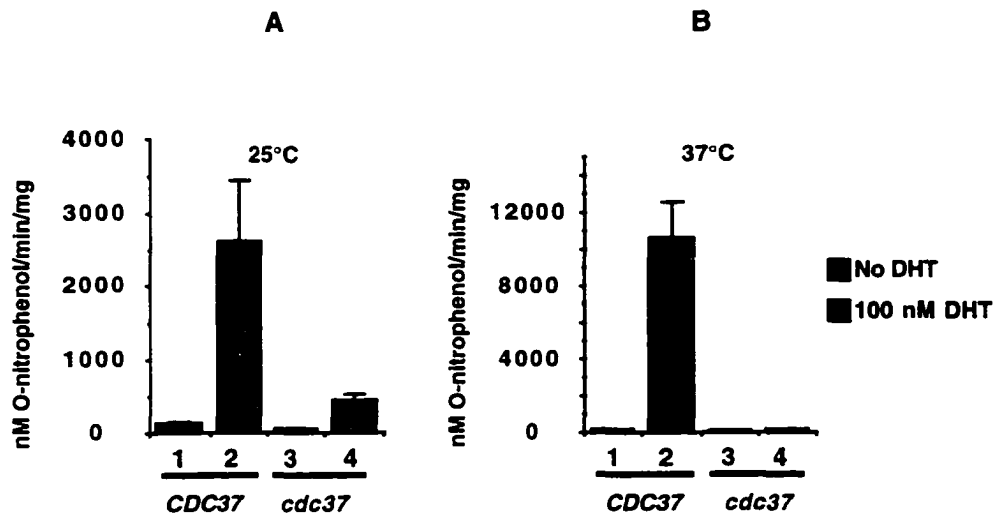


Figure 44. **Hormone dependent transactivation by AR is defective in a *cdc37* mutant strain.** (A) β -Galactosidase activity in wild type strain AFY17 (*CDC37*; lanes 1 and 2) and *cdc37*-34 strain AFY14 (*cdc37*; lanes 3 and 4). Cultures incubated at 25°C were treated with (lanes 2 and 4) or without (lanes 1 and 3) 100 nM DHT for 1 hour. (B) As in A except that the cultures were incubated at 37°C for 1 hour prior to hormone administration and for 1 hour afterward. All results are the mean of three independent experiments.

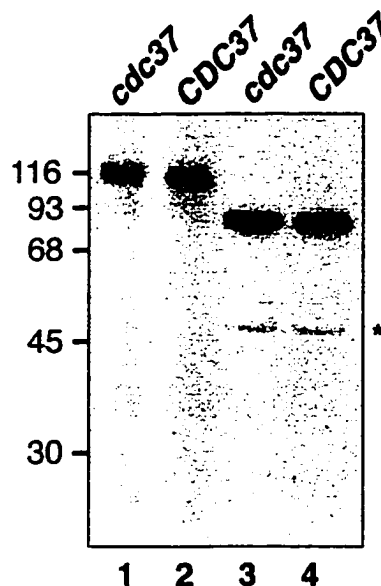


Figure 45. **Western Blot analysis of AR and AR¹⁻⁶⁰⁰ in wild type and *cdc37-34* mutant yeast.** Western blot analysis of AR (lanes 1 and 2) and AR¹⁻⁶⁰⁰ (lanes 3 and 4) in wild type strain AFY17 (*CDC37*; lanes 2 and 4) and *cdc37-34* strain AFY14 (*cdc37*; lanes 1 and 3). Analysis was performed using whole cell extracts (1 μ g in lanes 1 and 2 and 5 μ g in lanes 3 and 4) probed with anti-AR polyclonal antisera. Molecular weight size standards are shown in kDa. Star denotes breakdown product from AR¹⁻⁶⁰⁰.

Although a significant defect is seen in hormone dependent transactivation of the AR when comparing the wild type and the *cdc37-34* mutant strains, the mutant phenotype is only slightly suppressed (approximately two fold) when the wild type *CDC37* is expressed from a plasmid in the *cdc37-34* mutant background (Figure 46). Likewise, when a cross was made between the *cdc37-34* mutant strain and a wild type W3031a there was a similar defect in DHT induced *lacZ* gene expression as seen when the wild type plasmid is expressed in the mutant background at 25°C and 37°C (Figure 47-lanes 2 and 6), whereas, when the isogenic wild type was crossed with W3031a wild type *lacZ* expression was seen (Figure 47-lanes 4 and 8). This indicates that the *cdc37-34* allele is partially dominant negative over the wild type allele, since low copy number wild type *Cdc37* expression was unable to restore *LacZ* activity of the *cdc37-34* mutant to wild type levels. It was only when the wild type gene was over-expressed from a *GAL1* promoter on a multiple copy plasmid was wild type DHT induced *lacZ* gene expression restored (Figure 48). Expression in galactose was about 125 fold over that of the mutant protein grown in glucose as determined by Western blot (Figure 49). Although there seems to be some leakage of *CDC37* gene expression in glucose, which can explain the increase *lacZ* gene expression in glucose at 25°C (Figure 49-lane 2). *LacZ* reporter gene assays were also performed on *cdc37-34*, *cdc37-34/CDC37* and *CDC37* yeast using R1881 (Figure 50). As seen in Figure 50, 100 nM R1881 was able to induce *lacZ* gene expression to levels similar to that of 100 nM DHT. Likewise, a transactivation

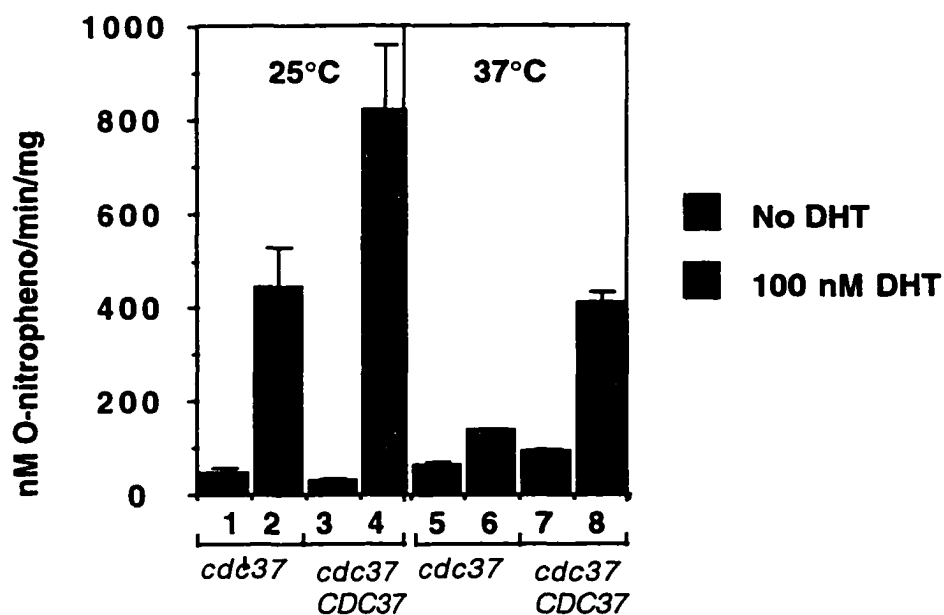


Figure 46. **The *cdc37-34* mutant allele acts dominant negative in AR signaling.** β -Galactosidase activity in the *cdc37-34* mutant strain containing a low copy number vector strain AFY15 (pRS316; lanes 1,2,5 and 6) or a plasmid containing *CDC37* strain AFY16 (pRSS2; *cdc37*/*CDC37* in lanes 3,4,7 and 8). The cells were incubated with (lanes 2,4,6 and 8) or without (lanes 1,3,5, and 7) 100 nM DHT for 1 hour at 25°C or 37°C as indicated. All results are the mean of three independent experiments.

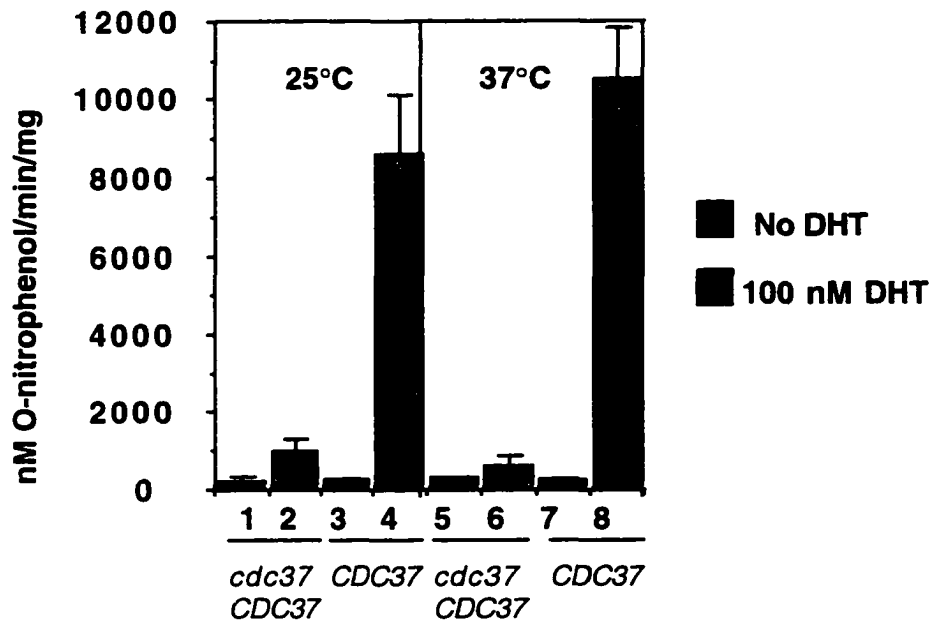


Figure 47. **Hormone dependent transactivation by AR is defective in a heterozygote *cdc37/CDC37* yeast strain.** β -Galactosidase activity in *cdc37-34* crossed with *W3031a* (*cdc37/CDC37*; lanes 1, 2, 5, and 6) and *CDC37* crossed with *W3031a* (*CDC37/CDC37*; lanes 3, 4, 7, and 8). Cultures incubated at 25°C were treated with (lanes 2 and 4) or without (lanes 1 and 3) 100 nM DHT for 1 hour. Cultures incubated at 37°C were treated with (lanes 6 and 8) or without (lanes 5 and 7) 100 nM DHT. As for 25°C except that the cultures were incubated at 37°C for 1 hour prior to DHT administration and for 1 hour afterward. All results are the mean of three independent experiments.

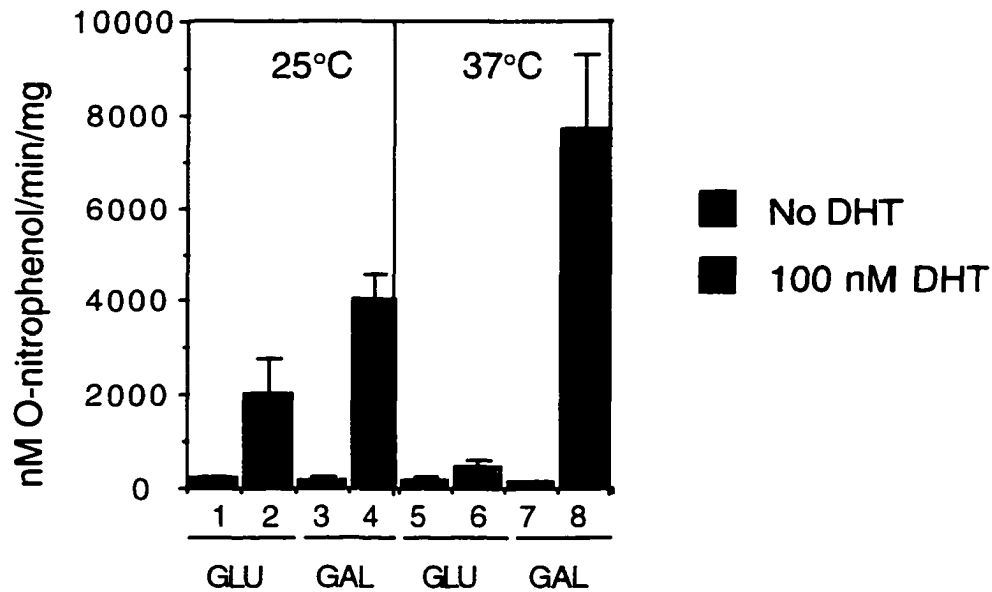


Figure 48. **Overexpression of *CDC37* in *cdc37-34* mutant yeast complements the AR signaling defect.** β -Galactosidase activity in the *cdc37-34* mutant containing the multicopy 2 μ plasmid containing *CDC37* under control of the inducible *GAL1* promoter strain AFY18. Cells grown in glucose (GLU; lanes 1, 2, 5, and 6) or galactose (GAL; lanes 3, 4, 7, and 8) were incubated with or without 100 nM DHT at 25°C or 37°C as indicated. All results are the mean of three independent experiments.

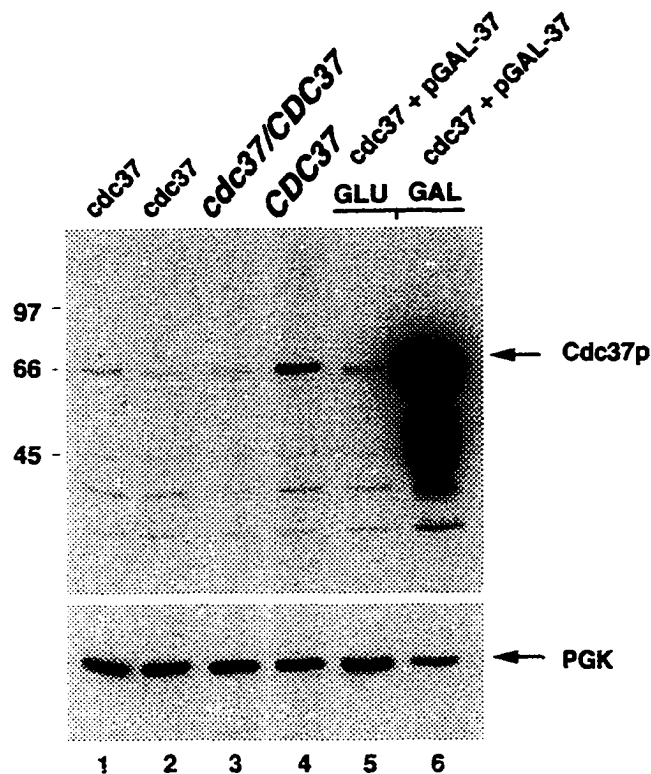


Figure 49. **Characterization of Protein Expression levels in *cdc37-34* mutant yeast.** Western Blot analysis of Cdc37 protein in whole-cell extracts from *cdc37-34* strain AFY14 (*cdc37*) grown at 25 °C (lane 1) or 37°C for 1 hour (lane 2), *cdc37-34* cells containing pRSS2 strain AFY16 (wild type *CDC37* on a low copy number plasmid) (*cdc37/CDC37*; lane 3), wild type strain AFY17 (*CDC37*; lane 4), and *cdc37-34* cells containing pGAL-37 strain AFY18 grown in glucose (lane 5) or galactose (lane 6). Full length Cdc37p is arrowed. Bottom panel, reprobng the same filter with antisera against phosphoglycerate kinase (PGK; arrowed).

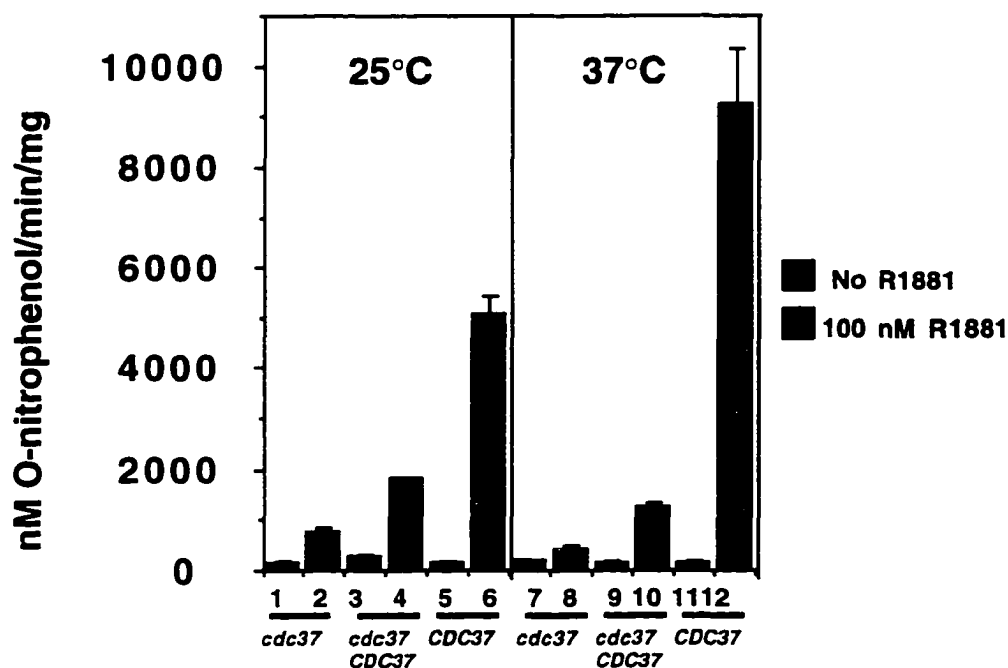


Figure 50. **R1881 dependent transactivation by AR is defective in a *cdc37* mutant strain.** β -Galactosidase activity in *cdc37-34* strain AFY14 (*cdc37*; lanes 1, 2, 7 and 8), *cdc37-34* containing a *CDC37* plasmid strain AFY16 (*cdc37/CDC37*; lanes 3, 4, 9, and 10) and wild type strain AFY17 (*CDC37*; lanes 5, 6, 11, and 12) yeast. Cultures incubated at 25°C were treated with (lanes 2, 4 and 6) or without (lanes 1, 3 and 5) 100 nM R1881 for 1 hour. Cultures incubated at 37°C were treated with (lanes 8, 10, and 12) or without (lanes 7, 9, and 11) 100 nM R1881. As for 25°C except that the cultures were incubated at 37°C for 1 hour prior to R1881 administration and for 1 hour afterward. All results are the mean of three independent experiments.

defect was seen with R1881 in both the *cdc37-34* and *cdc37-34/CDC37* yeast strains that were heterologously expressing AR.

In order to further characterize the *cdc37-34* mutant phenotype, Cdc37 protein levels were determined using Western blot analysis of whole cell extracts (Figure 49). Extracts were prepared from wild type, mutant, mutant with wild type on a plasmid and mutant with wild type overexpressed from a GAL1 promoter. The level of Cdc37p was approximately 20 fold less in the *cdc37-34* mutant when compared to the wild type (Figure 49). In addition, the mutant protein seems to have somewhat of a dominant negative effect on the wild type protein, since there was a less than additive increase in Cdc37 protein levels when the wild type gene was expressed in low copy number in the *cdc37-34* mutant strain (Figure 49). Interestingly, these heterozygotes were able to grow at 37°C, albeit somewhat slower than the wild type. Overexpression of Cdc37p from a GAL1 promoter on a multiple copy plasmid also led to a decrease in cell growth at 37°C (Figure 42), when compared to the wild type, even though DHT induced transactivation was restored to wild type levels under the same conditions (Figure 48). This suggests that overexpression of Cdc37p might be deleterious to growth at higher temperatures.

[2] Cdc37p Function Does Not Affect AR Hormone Binding, Even Though Cdc37p Itself Acts Via the Hormone Binding Domain

Previous studies have shown that deletion of the HBD releases the AR from hormone dependence for transactivation (Simenthal et. al., 1991) Likewise,

factors that function via this domain are no longer able to regulate the AR in a truncation mutant which lacks the HBD (Nathan and Lindquist, 1995; Caplan et al., 1995). For example, mutations in the YDJ1 gene which cause a defect in hormone dependent transactivation by the AR can be suppressed by deletion of the HBD (Caplan et al., 1995). In order to determine whether Cdc37p acts via the HBD a truncated AR (AR¹⁻⁶⁰⁰), which lacks the HBD, was constitutively expressed in both the wild type and *cdc37-34* mutant strains. Hormone independent lacZ reporter gene activity was measured for each of these strains at 25°C (the permissive temperature) (Figure 51). Levels of hormone-independent activity were similar when comparing the wild type and the *cdc37-34* mutant (Figure 51), indicating that Cdc37p acts via the HBD. This also demonstrated that mutation of Cdc37p does not affect lacZ reporter gene or AR¹⁻⁶⁰⁰ folding or expression. Similar to the situation with full length AR, the truncated AR protein level was not altered in the *cdc37-34* mutant (Figure 45).

The chaperone machine associates with the HBD of the AR (Mariovet et al., 1992) and loss of Hsp90 function results in a decrease in high affinity hormone binding (Chapter 2 of this thesis; Fang et al., 1996). Since Cdc37p works in association with Hsp90, it is possible that Cdc37p is acting via the HBD in hormone binding. In order to determine whether Cdc37p is required for hormone binding to the AR, direct ligand binding assays were performed on both the wild type and *cdc37-34* mutant strains with ³H R1881. These R1881 binding assays were performed at both the permissive (25°C) and

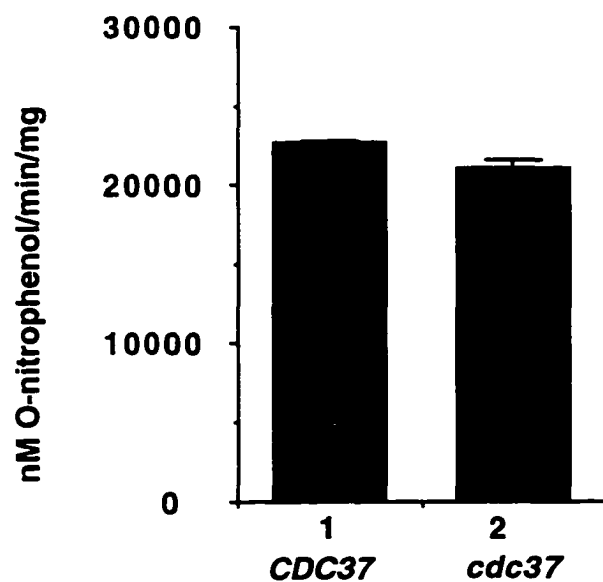


Figure 51. **Transactivation by AR^{1-600} in wild type and $cdc37-34$ mutant yeast strains.** Steady state β -Galactosidase activity in wild type strain AFY17ABC (*CDC37*; lane 1) and $cdc37-34$ strain AFY14ABC (*cdc37*; lane 2) mutant strains constitutively expressing AR^{1-600} . Results are the mean of three independent experiments.

non-permissive (37°C) temperatures. Results from Figure 52 show that there is very little difference if any between the levels of hormone binding when comparing the wild type and *cdc37-34* mutant strains at either the permissive or non-permissive temperatures. This indicates that hormone binding to the AR is not defective in the *cdc37-34* mutant strain.

The fact that the *cdc37-34* mutant strain was not defective in AR hormone binding was confirmed using HF competition assays. As previously described, HF normally is a poor competitor of R1881 binding to the AR in wild type yeast, but in the absence of functional Hsp90 HF acts as a potent competitor (Chapter 2 of this thesis (Figure 19); Fang et al., 1996). In order to further characterize the phenotype of Cdc37p in hormone binding, ligand competition assays were performed on both wild type and *cdc37-34* mutant yeast using ³H R1881 in the presence or in the absence of 25 uM HF and remaining R1881 binding was measured. Similar experiments were performed in parallel with the *G170D hsp82* mutant strain (Nathan and Lindquist, 1995) and were used as a positive control. As seen in Fig 53, very little competition was seen by HF in the *hsp82* mutant at the permissive temperature of 25°C, however, at the restrictive temperature 25 uM HF reduced R1881 to 20% of its original value. In contrast, in the *cdc37-34* strain HF acted as a poor competitor at both the permissive and non-permissive temperatures (Figure 53).

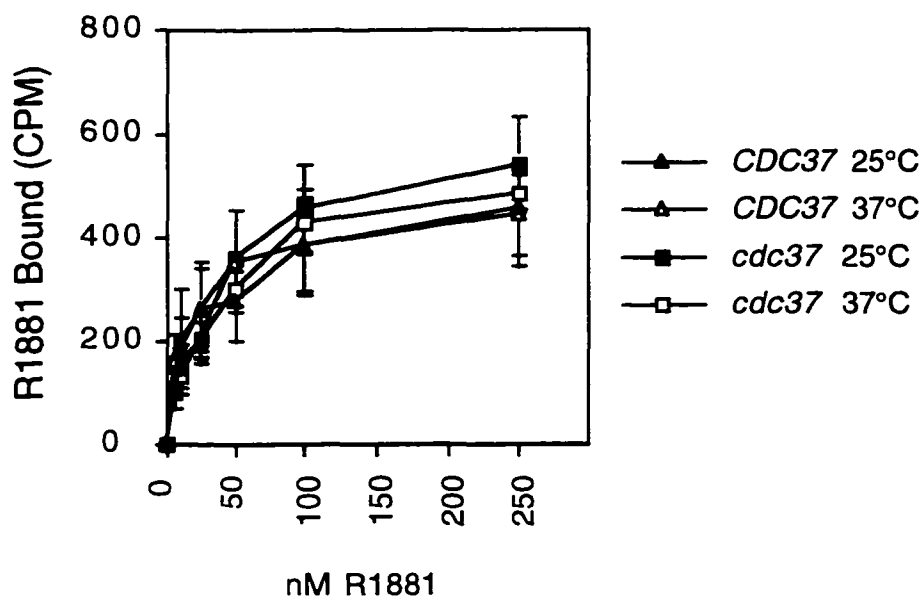


Figure 52. **Hormone binding to AR in wild type and *cdc37-34* mutant yeast strains.** Titration of ^3H -R1881 in yeast cells expressing AR. Wild-type strain AFY17 (*CDC37*; squares) and *cdc37-34* mutant strain AFY14 (*cdc37*; triangles) were tested at 25°C (open symbols) and 37°C (closed symbols). Results are the mean of three independent experiments.

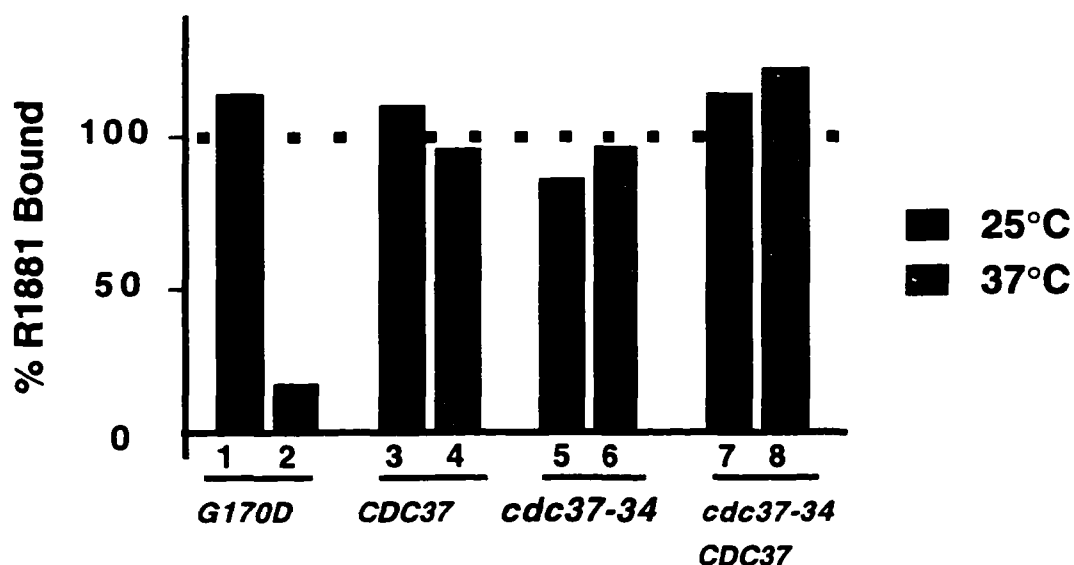


Figure 53. **HF competition assay on AR in *cdc37-34* mutant yeast.** *cdc37-34* strain AFY14 and *hsp82* mutant strain ACY99 were incubated at 25°C (lanes 1, 2, 5, and 6, respectively) or at 37°C (lanes 3, 4, 7, and 8, respectively) with (even lanes) or without (odd lanes) 25 μ M HF in the presence of 100 nM 3H R1881. Results are expressed as a percentage of the 3H R1881 binding in the presence of HF. Results are the mean of three independent experiments.

[3] Cdc37p Differentially Regulates GR and ER Signaling

In order to determine whether Cdc37p plays a conserved role in hormone dependent activation of all steroid receptors, lacZ reporter gene assays were performed on wild type and *cdc37-34* mutants strains that were heterologously expressing either GR or ER. For the GR studies, full length rat GR was transformed into both wild type and mutant yeast containing the same reporter plasmid used for the AR studies, since GRE's (glucocorticoid response element) and ARE's (androgen response elements) are identical (Ham et al., 1988). As seen in Fig 54A, DOC induced lacZ gene expression in both the wild type (lane 2) and the *cdc37-34* (lane 4) to approximately the same level (approximately 30 fold over background) at the permissive temperature. These results were in contrast to the defect seen in AR signaling at the same temperature (Fig 44A). Even at the non-permissive temperature of 37°C, there was only a two fold decrease in deoxycorticosterone (DOC) induced lacZ reporter gene expression in the *cdc37-34* mutant (Figure 54-lane 4), compared to an 80 fold decrease seen for the mutant at the same temperature with the AR (Figure 44B). In addition, there was a slight decrease in lacZ levels at 37°C, compared to 25°C for the GR. This was in sharp contrast to the increase seen for the AR under the same conditions (Figure 44B). This indicates that GR signaling is only moderately defective in the *cdc37-34* mutant strain.

For similar studies with the ER, a plasmid encoding the full length human receptor and a separate plasmid containing an ERE lacZ reporter gene construct were co-transformed into both the wild type and *cdc37-34* mutant

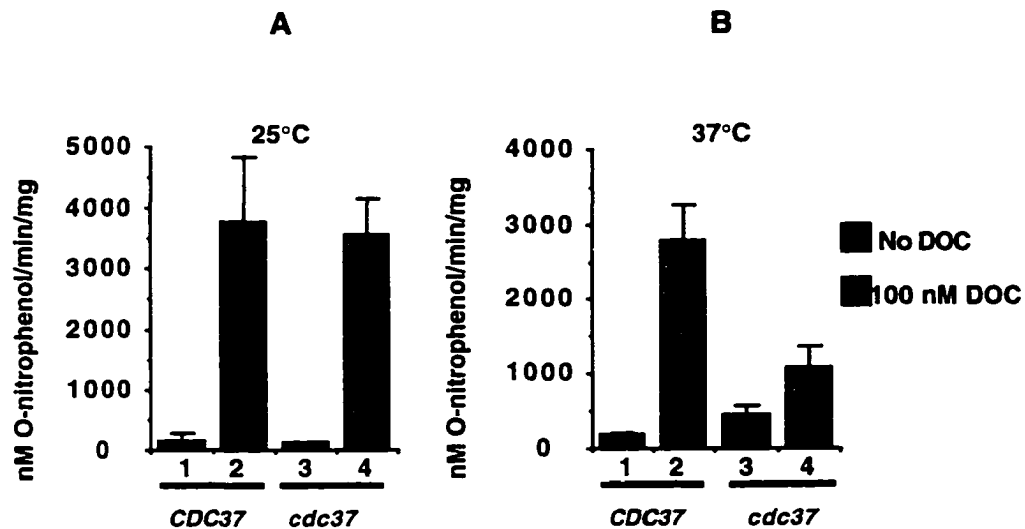


Figure 54. **Transactivation by GR in wild type and *cdc37-34* mutant strains.** (A and B) β -Galactosidase activity in wild type AFY17GR (*CDC37*; lanes 1 and 2) and *cdc37-34* AFY14GR (*cdc37*; lanes 3 and 4) mutant strains containing GR. Cultures were incubated at 25°C (A) or 37°C (B) for 1 hour prior to addition of 100 nM DOC. Samples in lanes 1 and 3 contained no hormone. Results are the mean of three independent experiments.

strain. LacZ reporter gene assays were performed on both strains in the presence or absence of 100 nM E2. As seen in Fig 55, E2 induced lacZ gene expression was similar in both wild type and *cdc37-34* mutant strains at the permissive temperature (Figure 55A) and there was less than a 50% decrease in the mutant at the non-permissive temperature (Figure 55B), compared to the wild type at the same temperature. Similar to GR, ER signaling is only modestly defective in the absence of functional Cdc37p.

Discussion

In this chapter, it has been demonstrated that the yeast CDC37 gene has differential function in the regulation of steroid hormone receptor activation. In the *cdc37-34* mutant strain, hormone dependent activation of the AR is dramatically reduced at both the permissive (Figure 44A) and non-permissive temperature (Figure 44B). This defect is dependent upon the presence of the HBD (Figure 51), suggesting that Cdc37p acts via this domain. However, there is no hormone binding defect in the *cdc37-34* strain, compared to the wild type strain (Figure 52 and 53). In contrast to the AR, GR and ER hormone dependent signaling is only moderately affected at the non-permissive and identical to the wild type at the permissive temperature (Figure 54 and 55). The *cdc37-34* allele was also partially dominant negative with respect to AR activation (Figure 46) and wild type Cdc37p levels (Figure 49). So AR signaling may require higher levels of Cdc37p for full function, whereas GR and ER can function reasonably at lower Cdc37p levels. This suggests that

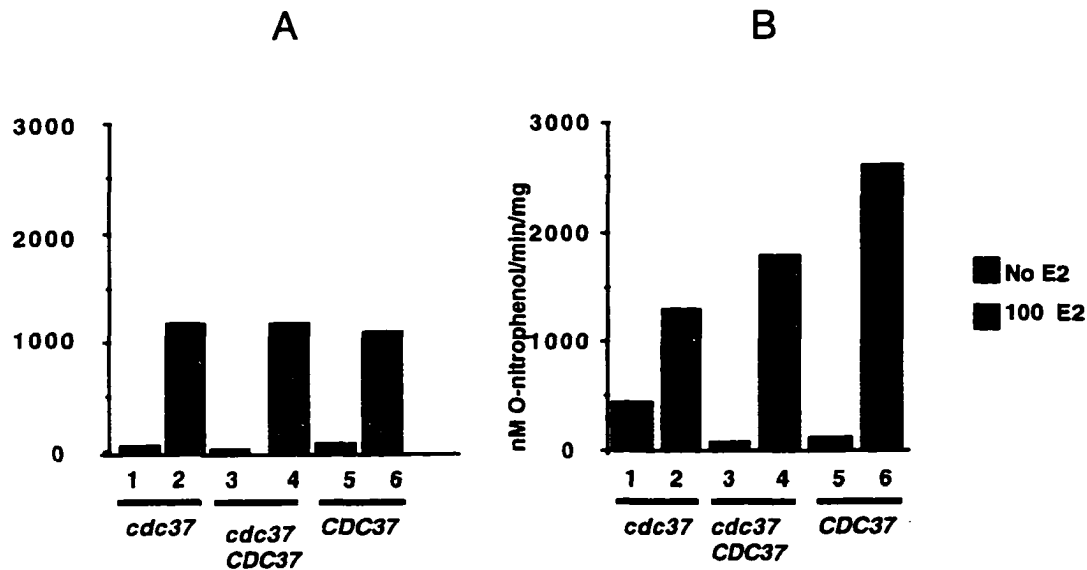


Figure 55. Transactivation by ER in wild type and *cdc37-34* mutant strains. (A and B) β -Galactosidase activity in *cdc37-34* strain AFY14ER(*cdc37*; lanes 1 and 2), *cdc37-34* containing pRSS2 strain AFY16ER (low copy number plasmid that constitutively expresses wild type Cdc37p (*cdc37/CDC37*; lanes 3 and 4) and wild type strain AFY17ER (*CDC37*; lanes 5 and 6) mutant strains containing ER. Cultures were incubated at 25°C (A) and 37°C (B) for 1 hour prior to treatment. Cells were treated with (lanes 2, 4, and 6) or without (lanes 1, 3, and 5) 100 nME2.

Cdc37p is involved in the hormone dependent activation of many steroid hormone receptor, but to differing extents.

Similar receptor specific differences in hormone dependent activation have also been seen with Hsp90. In previous studies, GR activation was severely compromised in *hsp82^{G170D}* mutant yeast (Nathan and Lindquist, 1995), whereas in the same mutant strain hormone dependent activation of the AR was only reduced 2-3 fold at saturating concentration of hormone (Fang et al., 1996). Similarly, activation differences have been seen among other *hsp82* mutants which were defective for receptor signaling. One of the most extreme examples is that of the E431K mutant, in this mutant hormone dependent GR signaling was severely reduced, whereas, ER, MR and PR signaling was not affected (Bohen and Yamamoto, 1993). In contrast, hormone dependent activation of all four receptors was severely compromised in the G313N mutant (Bohen and Yamamoto, 1993). These differences as well as the one seen with *cdc37-34* may reflect upon distinct properties related to the activation of each receptor.

The results presented here are the first conclusive demonstration for the function of Cdc37p in steroid hormone receptor function. Several previous reports have demonstrated that Cdc37p functions only in protein kinase activation pathways (Gerber et al., 1995; Valay et al., 1995; Dey et al., 1996; Stepanova et al., 1996). Since the only previously demonstrated role for Cdc37p has been in protein kinase activation, this raises the question as to whether Cdc37p might act indirectly on AR via a protein kinase that is required

for hormone dependent function. However, it has been previously demonstrated using transfection studies in mammalian cells that deletion of all three major phosphorylation sites in the AR results in only a 30% decrease in AR transactivation (Jenster et al., 1994; Zhou et al., 1995). These previous results would infer that phosphorylation does not play a major role in hormone dependent activation of the AR, since loss of Cdc37p function results in a greater than 90% decrease in receptor function . This leads us to postulate that Cdc37p might interact directly with the AR or Hsp90 is the AR aporeceptor complex itself.

It is unclear exactly how Cdc37p might fit into the stepwise pathway to the activation of AR, since loss of its function has no effect on high affinity hormone binding and it does not seem to associate stably with steroid receptors. This suggests that Cdc37p might play a role downstream of hormone binding, but prior to DNA binding and transactivation, since Cdc37p is not required for hormone independent transactivation. This leads one to postulate that Cdc37p might be involved in the conversion of the hormone bound receptor into its active form. This conversion may involve conformational changes in the HBD post-hormone binding that are needed for downstream receptor function. Little if any is known about these types of hormone initiated allosteric changes, but it remains possible that Cdc37p might act as a molecular chaperone and facilitate these alterations upon ligand binding. Interestingly, Kimura et al. (1997) recently demonstrated that Cdc37p can act as a molecular chaperone *in vitro* by stabilizing the partially folded form of a polypeptide (Kimura et. al.,

1997). It is therefore possible that Cdc37p exerts similar effects on the HBD in hormone dependent activation of steroid receptors.

Experimental Methods

Yeast Strains and Growth Conditions

Yeast cells were cultured in selective media (0.67% yeast nitrogen base, 2% glucose or galactose plus the appropriate amino acids) using standard procedures. The temperature-sensitive strain 8A7 (*MAT α cdc37-34, leu2, lys2, trp1, ura3*) was used as the parental strain for this study. Plasmid transformations were performed by the LiAc procedure as described previously (Geitz et al., 1995). Plasmids used in this study were: pG1-hAR (human AR; Caplan et al., 1995), pABC (*AR¹⁻⁶⁰⁰, TRP1*; Caplan et al., 1995), pGAL-37 (GAL1 promoter, CDC37, LEU2), pPGKareLacZ (*lacZ* reporter gene under control of androgen response elements, URA3; Purvis et al., 1991), pPGKgal-hAR (galactose-inducible AR gene, URA3; Purvis et al., 1991), pGN795 (rat GR, TRP1; Schena and Yamamoto, 1988), pRSS2 (CDC37, CEN/ARS, URA3; Dey et al., 1996) and pRS315-CDC37 (CDC37, CEN/ARS, LEU2), p2HGPDER/CYC (human ER, 2 μ , HIS3; Kimura et al., 1995), pUC Δ SS-ERE (*lacZ* reporter gene under control of estrogen response element, URA3; Picard et al., 1990) and pJR3 (human ER, 2 μ , TRP1; Chapter 2 of this thesis).

The isogenic wild type strain was constructed by transforming a 6-kb DNA fragment containing the wild type CDC37 (*Sal1/Hind111* digestion of pRSS2

(Dey et al., 1996) into AFY14 (8A7 with pG1-hAR and pPGKareLacZC) and colonies were selected for growth at 37°C. The resulting strain was called AFY17. Gene replacement of the mutant allele was confirmed using direct genomic DNA sequencing (sequence analysis performed by Dr. Robert Donnelly, UNJ). Strains containing pABC (Truncated AR), pPGKgalhAR (AR under galactose control), pGN795 (GR) and p2HGPDER/CYC (Picard et. al., 1990) were prepared after deselection of pG1hAR (AR) from AFY14 and AFY17 on non-selective media and subsequent transformation by these plasmids. The resulting strains that contained pABC, pPGKgalhAR or pGN795 all contained the pPGKarelacZC reporter plasmid, whereas, the strains containing p2HGPDER/CYC were subsequently transformed with pUCΔSS-ERE. The *hsp82^{G170D}* mutant strain used for the sake of comparison was described previously (Nathan and Lindquist, 1995; Fang et al., 1996; Chapter 2 of this thesis).

β-Galactosidase Activity Assays

Yeast cells were grown to early log phase and preincubated at either 25°C or 37°C for 1 hour before addition of DHT for the AR, DOC for the GR and E2 for the ER. The cells were subsequently incubated for another hour at the same temperature prior to the preparation of extracts as described previously (Caplan et al., 1995). Following extract preparation samples were assayed for β-Galactosidase activity as described previously by Caplan et al. (1995).

Ligand Binding Assays

Yeast cells were grown in selective media containing 2% glucose to early log phase ($OD^{600} = 0.2$) and 1 ml aliquots were subsequently incubated at either 25°C or 37°C for 30 minutes. Following this preincubation, cells were incubated with 3H R1881 for an additional 1.5 hours at the same temperature. The cells were then washed 3 times with 1 ml of water each and counted in 5 ml of liquid scintillation fluid. Non-specific bound cpm was calculated by subtracting the cpm obtained from samples which were incubated with a 100 fold excess of unlabeled R1881 from the samples incubated in the absence of cold R1881.

Ligand competition assays were also performed with yeast cells which were grown to early log phase ($OD^{600} = 0.2$) as described above. Following a 30 minute preincubation at either 25°C or 37°C, cells were incubated with 100 nM 3H R1881 in the presence or absence of varying concentrations of HF for an additional 1.5 hours at the same temperature. The cells were then washed 3 times with 1 ml of water each and counted in 5 ml of scintillation fluid.

Western Blot Analysis

The levels of AR and Cdc37p were assayed by Western blot analysis using either anti-AR or anti-Cdc37p specific antibodies. Yeast lysates were prepared as previously described (Caplan et. al., 1995) Lysates (5 μ g total protein) were resolved by SDS-PAGE and the proteins in the gel were subsequently

transferred to nitrocellulose (0.45 μ , MSI). Filters were briefly rinsed with TTBS (20 mM Tris-HCl, pH 7.5, 0.5 M NaCl, 0.05% Tween 20) and blocked overnight at room temperature with TTBS containing 5% non-fat dry milk. Filters were subsequently incubated with polyclonal antibodies specific for the AR or monoclonal antibodies specific for yeast Cdc37p (antibodies were diluted in antibody dilution buffer, 1x PBS, 3% bovine serum albumin, 0.05% Tween 20 and 0.1% thimerosal (1:1000 for anti-Cdc37p and 1:1000 for anti-AR) for 1 hour. Filters were washed three times for 10 minutes each in TTBS. Filters were then incubated with secondary antibody (HRP conjugated goat anti-rabbit IgG, diluted 1:10,000 in antibody dilution buffer for anti-ER; and HRP conjugated goat anti-mouse IgG, diluted 1:10,000 in antibody dilution buffer for anti-Cdc37) for 1 hour and subsequently washed three times for 10 minutes each in TTBS. Filters were treated with the chemiluminescence reagent (Pierce) and exposed to X-ray film. An identical filter was probed with anti-PGK (1:300,000 in antibody dilution buffer) to control for loading differences. The secondary antibody for the anti-PGK was HRP conjugated goat anti-rabbit IgG (1:10,000 in antibody dilution buffer). Washes and incubation times were identical to that for anti-Cdc37p and anti-AR.

CHAPTER V

OVERALL DISCUSSION AND FUTURE DIRECTION

It has been long known that Hsp90 is present in the aporeceptor complex of all members of the steroid hormone receptor superfamily including the AR and ER, although little was known of its function *in vivo* (Mariovet et al, 1992; Redeuilh et al, 1987; Nemoto et al, 1992; Schuh et al, 1985; Radanyi et al, 1989; Sanchez et al, 1985 and Rafestin-Oblin et al, 1989). There has been a recent resurgence in the study of the function of Hsp90. This renewed interest in the function of Hsp90 was sparked from the discovery that Hsp90 itself is a target for a group of anti-tumor agents called the benzaquinoid ansamycins (Whitesell et. al., 1994). This group of anti-tumor compounds includes MacBecin 1, MacBecin 2 and geldanamycin. Hsp90 has been recently crystallized in the presence of geldanamycin (Stebbins et. al., 1997). The crystal structure revealed that geldanamycin itself is able to interact and perhaps block binding of ATP to the ATP binding domain of Hsp90. Likewise, as expected geldanamycin can specifically inhibit by direct binding many of the signal transduction pathways that Hsp90 is known to regulate including that of several protein kinases (Uehara et. al., 1988) and steroid hormone receptors (Smith et. al., 1995; Segnitz and Gehring, 1997).

Previous studies suggested that Hsp90 is required for high affinity hormone binding to the GR (Picard et. al., 1990; Bresnick et. al., 1989; Bohlen, 1995), PR (Smith, 1993) and MR (Schulman et. al., 1992). These studies have been performed both *in vitro* and *in vivo*. *In vitro* studies suggest that GR and MR have strict requirements for Hsp90, since in its absence neither receptor is able

to bind hormone. Likewise, results from *in vivo* studies using the yeast model system confirm the requirement of Hsp90 function in high affinity hormone binding to the GR (Bohen, 1995) and MR (Schulman et. al., 1992). In contrast, PR has somewhat of a modified requirement for Hsp90 (Smith, 1993) PR is able to bind hormone at 4°C in the absence of Hsp90, but when these same experiment are performed at 37°C PR is unable to bind hormone in the absence of Hsp90. Until now it was thought that AR and ER had no requirement for Hsp90 in hormone binding. *In vitro* studies had previously suggested that AR and ER could bind hormone in the absence of Hsp90 association (Nemoto et. al, 1992; Binart et. al., 1995). The caveat being these experiments were performed at non-physiological temperature *in vitro*, conditions in which molecular chaperone may not normally be required. Since molecular chaperones themselves are needed to block off-pathway inter and intra-molecular interactions under conditions of high protein concentration and high temperature. However, typical *in vitro* experiment is performed at low temperature under low protein concentrations. Therefore it is advantageous to perform such experiment with molecular chaperones *in vivo* under physiological conditions.

In the study presented here, the yeast system was utilized to determine whether Hsp90 itself is needed for hormone binding to the AR and ER *in vivo*. The results presented here demonstrate that Hsp90 is required for both full activation and high affinity hormone binding to the AR and ER. In the absence of functional Hsp90, both the AR and the ER are unable to bind hormone to the

same extent as under wild type conditions (Figure 17-19, 9) . Segnitz and Gehring also demonstrated that there was a similar decrease in ER hormone binding when animal cells were treated with the anti-Hsp90 agent, geldanamycin (Segnitz and Gehring, 1997).

Recent studies on the crystal structure of ER demonstrate that both E2 (hormone) and raloxifene (so-called partial antagonist) interact with similar residues in the hydrophobic hormone binding domain (Brzozowski et. al., 1997). Likewise in the studies described here, there was also an alteration in the manner in which so called hormone antagonist were able to interact with both the AR and ER, which would be expected since both ligands are interacting with the HBD. In the case of the AR, the normally weak competitive inhibitor HF acted as a more potent inhibitor of hormone binding in the absence of Hsp90 function (Figure 19) Whether this was due to decrease in hormone binding affinity or an increase in the affinity of HF is not known. In contrast, 4-OHT was actually able to increase the binding of DES (hormone) to the ER in the absence of functional Hsp90 (Figure 5, 8)), although this increase in hormone binding did not lead to concurrent stimulation of transactivation (Figure 16) Taken together these data suggest that Hsp90 is required for proper function and hormone binding of both the AR and ER *in vivo*. This would place the AR and the ER in a similar category as PR for their requirement for Hsp90, since all three receptors are able to function in the absence of Hsp90 in non-physiological conditions. The importance of Hsp90

has also been suggested by the fact that naturally glucocorticoid resistant leukemia cells are significantly decreased in Hsp90p (Kojika et. al., 1996).

As previously described, Hsp90 does not exist on its own in the aporeceptor complex. It is joined with several co-chaperones of which several are binding proteins of Hsp90. Therefore it is crucial to separate the role of Hsp90 itself from its co-chaperones in steroid receptor hormone binding and action. Does Hsp90 itself function to allow for hormone dependent receptor function or is this the function of one of the several co-chaperones found in the unliganded receptor complex? In order to determine this the role of each member of this complex must be analyzed individually.

Hsp70 is one of the best characterized components of the Hsp90 chaperone machine. Hsp70 is able to assist in the folding of newly synthesized polypeptide chains coming off the ribosome (Gething and Sambrook, 1993). Likewise, Hsp70 itself has been implicated to play a role in signaling by the GR *in vitro* (Hutchison et. al., 1994; Smith et. al., 1994). Upon depletion of Hsp70, Hsp90 is not present in the aporeceptor complex and GR is unable to bind hormone, suggesting that Hsp70 is required for hormone binding. This is probably due to the fact that Hsp90 is not recruited into the unliganded receptor complex in the absence of Hsp70. Hsp70 depends on the presence of ATP for its function in protein folding (Liberek et. al., 1991). Hsp70 is able to bind ATP and in its ATP bound form is unable to stably interact with its polypeptide substrates. Upon ATP hydrolysis, Hsp70-ATP is converted to Hsp70-ADP and in this form is able to stably interact with its polypeptide

substrates. Thus Hsp70 must be able to efficiently hydrolyze ATP to ADP and subsequently exchange nucleotides to continue the cycle. In order to accomplish this task, Hsp70 is aided by other components of the chaperone machine, including in these is Ydj1p.

Ydj1 is able to stimulate the low level ATPase activity of Hsp70 (Tsai and Douglas, 1996) and has general chaperone function of its own via its zinc finger and carboxy-terminal domains (Lu and Cyr, 1998). Ydj1p is considered a Type 1 J protein, since it contains the J G/F and zinc finger domains. It had been previously demonstrated that yeast containing a mutant form or deletion of the Ydj1p are defective for AR and ER signaling (Caplan et. al., 1995; Kimura et. al., 1995). In the case of the AR there was a dramatic decrease in hormone induced signaling which was dependent upon the presence of the HBD (Caplan et. al., 1995). Therefore, it was postulated that this defect may be in the ability of AR to bind hormone in the absence of Ydj1p.

In vivo yeast studies presented here demonstrate that the decrease in AR activation seen in the *ydj1* mutant yeast is indeed caused in part by a defect in hormone binding (Figure 24). AR is unable to bind hormone at wild type levels in yeast deleted for or containing a mutation in Ydj1p. Loss of J domain function resulted in a decrease in AR hormone binding and transactivation (Figure 27 and 34). This suggest not only that the J domains essential for hormone dependent activation, but also that Ydj1 is more that likely acting via Hsp70 in AR signaling. Likewise, loss of the zinc finger domain and/or farnesylation also results in a decrease in AR hormone binding and

transactivation (Figure 27 and 34), suggesting that either or both of these regions act in conjunction with the J domain to allow for wild type AR signaling. The only domain that is clearly dispensable for hormone binding in the carboxy-terminal domain of Ydj1, since the ydj1-G315D mutant (which is mutated in the carboxy-terminal domain) is not defective for hormone binding to the AR (Figure 30).

Under normal conditions *in vivo*, the AR does not interact with the yeast chaperone Ydj1p, more appropriately it would interact with the human homologue of Ydj1p. Hdj2p is a human homologue of Ydj1 and is also a Type 1 J protein (For review see Cheetham and Caplan, 1998). The question posed in the study presented here is "Can a human homologue of Ydj1 complement the AR signaling defect of the Ydj1 null strain?". Of the three human J proteins tested, it would be expected that only Hdj2p would be able to fully complement the AR signaling defects. As expected neither Type 2 J protein (contains J G/F domains), Hsj1p nor Hdj1p, was able to complement either the hormone binding or transactivation defects. Only Hdj2p was able to fully complement the hormone binding, ligand competition and transactivation defect. Yeast deleted for Ydj1p regained essentially wild type hormone binding (Figure 36), ligand competition (Figure 38) and hormone dependent transactivation (Figure 39) when transformed with a Hdj2p expression plasmid. This demonstrates that a human molecular chaperone can work in association with yeast chaperones to allow for proper regulation of a human steroid receptor. Likewise the human ER was defective in hormone dependent signaling in the

same *ydj1* mutant yeast. The importance of Ydj1p in steroid receptor signaling has also been recently confirmed using an in vitro reconstitution system (Dittmar et al., 1998) (Figure 40-41). It was shown that depletion of Hsp40 caused a decrease in hormone binding to the GR and this defect was able to be complemented by the addition of Ydj1p (Dittmar et al., 1998). Taken together these results suggest that Ydj1p, or more correctly the human homologue Hdj2p is required for steroid hormone receptor signaling probably via Hsp70. These results also suggest that Type 1 J proteins may act via Hsp70 in recruiting Hsp90 into the aporeceptor complex, placing its role upstream of Hsp90 in the attainment of the high affinity hormone binding conformation.

Other components of the chaperone machine that are seen in association with Hsp90 in the unliganded receptor complex are p60/Sti1, p23/Sba1, p48/HIP and one of the many cyclophilins. Of these components, p60 is thought to be the nucleotide exchange factor of Hsp70 and has been demonstrated to play a minor role in GR signaling in vivo using yeast as a model organism (Chang et al., 1997). Upon deletion of Sti1, yeast demonstrate a modest decrease in hormone dependent transactivation. Likewise, the cyclophilin Cpr7 has also been demonstrated to play a role in GR signaling. Again a modest decrease in hormone dependent transactivation is seen in a $\Delta cpr7$ yeast strain (Duina et al., 1996). However, in similar studies Picard et al., was unable to see a GR, ER or PR signaling defect upon deletion of the cyclophilin Cyp40/Cpr6 (Warth et al., 1997). This suggests that Cpr7,

but not Cpr6 plays a role in receptor signaling. Of the co-chaperones previously described, only p23/Sba1 has not been shown to play an important role *in vivo* in steroid receptor signaling, even though, p23 is essential for high affinity hormone binding to the GR and PR *in vitro* in rabbit reticulocyte lysates (Hutchison et. al., 1995; Hutchison et. al., 1994; Johnson et. al., 1994; Johnson and Toft, 1995; Smith et. al., 1990a). GR and AR hormone dependent signaling is essentially wild type in the absence of the SBA1 gene product, suggesting that p23 plays no essential role in receptor signaling *in vivo* (Fang et. al., 1998; Bohen, 1998).

Cdc37p is also able to specifically bind Hsp90 (Whitelaw et., 1991; Brugge et. al., 1986) and was postulated to be the protein kinase targeting component of the Hsp90 chaperone machine. Cdc37p is essential for CDK4 and CDK6 (Dai et. al., 1996; Stepanova et. al., 1996), Cdc28 (Gerber et. al., 1995), *Drosophila* Sevenless (Cutworth and Rubin, 1994), v-src (Dey et. al., 1996) signaling pathways, to mention a few. Until recently it was thought that p50/Cdc37p was only essential for protein kinase signaling via the Hsp90 chaperone machine, since it is not seen in the aporeceptor complex of either ER or GR (Nair et. al., 1997). However, studies presented here are to the contrary and are the first demonstration of Cdc37p's role in steroid hormone receptor signaling. In the absence of functional Cdc37p, AR had a profound decrease in hormone dependent transactivation (Figure 44), whereas, GR (Figure 54) and ER (Figure 55) signaling was only moderately effect upon loss of function. This suggest that Cdc37p differentially affects steroid hormone

receptors. Previous studies have shown similar differential effects with the E431K *hsp82* mutant, E431K dramatically decreased GR hormone binding and subsequent transactivation, whereas, ER, PR and MR signaling was slightly affected (Bohen and Yamamoto, 1993). Interestingly, the AR signaling defect seen in the Cdc37p mutant was dependent upon the presence of the HBD (Figure 51), even though, there was no alteration in hormone binding (Figure 52) or ligand competition (Figure 53). Since, previous studies have shown that AR is a phosphoprotein and since Cdc37p is thought to be the protein kinase targeting component of the chaperone machine one might postulate that Cdc37p is acting on a protein kinase which in turn is phosphorylating the AR. However, previous studies have demonstrated that the three main phosphorylation sites in AR can be mutated and there is only a 30% decrease in hormone dependent transactivation, suggesting that Cdc37p must be acting either via Hsp90 or the AR itself (Jenster et. al., 1994; Zhou et. al., 1995). This suggests that Cdc37p may be acting via the HBD after hormone binding possibly facilitating conformational changes that occur in the HBD upon ligand binding, placing Cdc37p after Hsp90 in the pathway to steroid receptor activation.

To date it has been demonstrated using either *in vitro* or *in vivo* model systems that Hsp90 (Picard et. al., 1990; Bohem and Yamamoto, 1993; Bohem, 1995; Bresnick et. al., 1989), Hsp70 (Hutchison et. al., 1994), Ydj1 (Caplan et. al., 1995; Kimura et. al., 1995), p50/Cdc37 (Fliss et. al., 1007), p60/Sti1 (Chang et. al., 1997), cyclophilins (Duina et. al., 1996) and p23/Sba1 (Hutchison et. al.,

1995) are essential for steroid receptor signaling. In order to fully understand the physiological role each of these individual components of the Hsp90 chaperone machine plays in receptor signaling, mammalian *in vivo* model systems must be developed to assess their role in their native environment. Recently two naturally occurring model system have been identified in which steroid receptor signaling is aberrant. In both of these systems, the defect is not in the steroid receptor itself, but in components that help regulate receptor function. One of these systems is a glucocorticoid resistant leukemia cell line that is unaffected or minimally affected by the presence of glucocorticoids (Kojika et. al., 1996).. Interestingly, both Hsp90 and Hsp70 are abnormal in either levels or composition in these leukemic cell lines. These cells could be utilized to determine whether Hsp90 or Hsp70 are required for receptor signaling in its native environment. In such studies wild type Hsp90 or Hsp70 could be overexpressed in order to determine whether the GR signaling defect could be complemented. If overexpression of either Hsp90 or Hsp70 are able to restore normal GR signaling this would be direct evidence of their role in steroid receptor signaling.

The second mammalian *in vivo* model is that of the glucocorticoid resistant squirrel monkey GR (Reynolds et. al., 1997). Again in this system the GR is unable to be activated except at high concentrations of glucocorticoid. This defect is not an aberration in the receptor itself, but an alteration in a regulatory factor. This system can be exploited and other components of the chaperone

machine can be transfected in these cells in order to determine their role in receptor signaling.

An alternative approach would be to utilize the functional conservation in the chaperone machinery to develop dominant negative mutants in the yeast system. And because of the conservation of the chaperone machine, these yeast dominant negative mutants could be transformed into human cells that normally express either the AR (LNCaP-human prostate cancer cell line) or the ER (MCF-7-human breast cancer cell line) in order to specifically block function of individual components of the chaperone machine. The constructs could be expressed under the control of inducible promoter in order to conditionally regulate the production of the dominant negative chaperone protein. Subsequently, hormone binding and transactivation studies could be performed of these cell lines that are expressing dominant negative mutants of each of the chaperone machine components. Dominant negative mutants for Hsp90 (Louvion et. al., 1996) and Cdc37 (Fliss et. al., 1997) have already been reported in the literature and constructs for the other co-chaperones could easily be made.

The use of these mammalian model systems will allow for the further dissection and confirmation of results previously acquired using *in vitro* and yeast model systems and should further the understanding of the role of each component of the Hsp90 chaperone machine in steroid hormone receptor function. The understanding of the differential regulation of these receptors could also eventually lead to the development of targeted therapeutics.

CHAPTER VI

APPENDICES

Appendix I

List of plasmids

Plasmid name	Genotype	Reference
pts38RV	hsp82 ^{A97I} /CEN/ARS/HIS3	Kimura et al., 1994
pcs2-3RV	hsp82 ^{T101I} /CEN/ARS/HIS3	Kimura et al., 1994
pts33BE	hsp82 ^{S485Y} /CEN/ARS/HIS3	Kimura et al., 1994
pTCA/hsp82 E431K	hsp82 ^{E431K} /CEN/ARS/TRP1	Bohen & Yamamoto, 1993
pTCA/hsp82 G313N	hsp82 ^{G313N} /CEN/ARS/TRP1	Bohen & Yamamoto, 1993
pTCA/hsp82 T525I	hsp82 ^{T525I} /CEN/ARS/TRP1	Bohen & Yamamoto, 1993
pG1-hAR	hAR/2 μ /TRP1	Caplan et al., 1995
pARU	hAR/2 μ /URA3	Caplan et al., 1995
pARH	hAR/2 μ /HIS3	Caplan et al., 1995
p2HGPDER/CYC	hER/2 μ /HIS3	Picard et al., 1990
pJR3	hER/2 μ /TRP1	Cloned by Jie Rao
pJR1	HSP82/CEN/ARS/URA3	Fang et al., 1998
pUC Δ SS-ERE	LacZ/2 μ /URA3	Picard et al., 1990
pPGKareLacZC	LacZ/CEN/ARS/URA3	Purvis et al., 1991
pYX233hsp40	HDJ1/GAL1/HIS3	
pGALHDJ2	HDJ2/GAL1/CEN/ARS/LEU2	Cloned by Jie Rao
pGALHSJ1	HSJ1/GAL1/CEN/ARS/LEU2	This thesis
pCB338	SIS1/2 μ /URA3	Caplan and Douglas, 1991
pAV151	ydj1-151/CEN/ARS/LEU2	Caplan et al., 1992
pGALYDJ1	YDJ1/GAL1/CEN/ARS/URA3	Caplan et al., 1992
pAV7	YDJ1,CEN/ARS/LEU2	Caplan et al., 1992)

pJR4	LacZ/CEN/ARS/LEU2	Cloned by Jie Rao
ydj1-H34QpRS315	ydj1-H34Q/CEN/ARS/LEU2	Cloned by Jie Rao
pABC	AR ¹⁻⁶⁰⁰ /2 μ /TRP1	Caplan et al., 1995
pGAL-37	CDC37/GAL1/CEN/ARS/LEU2	Fliss et. al., 1997
pPGKgal-hAR	AR/GAL1/2 μ /URA3	Purvis et al., 1991
pGN795	rGR/2 μ /TRP1	Schena & Yamamoto, 1988
pRSS2	CDC37/CEN/ARS/URA3	Dey et al., 1996
pRS315CDC37	CDC37/CEN/ARS/LEU2	This thesis

Appendix II

List of Strains

Strain Name	Genotype
W3031a	<i>a ade2 leu2 his3 trp1 ura3 can1</i>
P82a	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pTGPdHsp82
G170Da	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pTGpd/T1-101
ACY98	P82a with pARH
ACY99	G170Da with pARH
ACY 2W	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pTGPdHsp82 and pJR1
ACY 1WU	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pJR1
AFY43	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pTGPdHsp82, pUCΔSS-ERE and p2HGPDER/CYC
AFY44	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pTGpd/T1-101, pUCΔSS-ERE and p2HGPDER/CYC
AFYA97I	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pts38RV
AFYT101I	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pcs2-3RV
AFYE431K	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pTCA/hsp82 E431K
AFYS485Y	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pts33BE
AFYT525I	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pTCA/hsp82 T525I
AFYG313N	<i>a ade2 leu2 his3 trp1 ura3 can1 (hsc82 :: LEU2) (hsp82:: LEU2)</i> pTCA/hsp82 G313N
AFYA97IER	AFYA97I with pJR3 and pUCΔSS-ERE
AFYT101IER	AFYT101I with pJR3 and pUCΔSS-ERE

AFYE431KER AFYE431K with p2HGPDER/CYC and pUCΔSS-ERE
 AFYS485YER AFYS485Y with p2HGPDER/CYC and pUCΔSS-ERE
 AFYT525IER AFYT525I with pJR3 and pUCΔSS-ERE
 AFYG313NER AFYG313N with p2HGPDER/CYC and pUCΔSS-ERE
 MYY405 *a leu2 his3 URA :: YDJ1*
 MYY290 *a leu2 his3 ura3*
 AFY100 MYY405 *ura3*
 MYY290AR MYY290 with pARH and pPGKareLacZC
 AFY100AR AFY100 with pARH and pPGKareLacZC
 AFY100H34Q AFY100AR with pYQPD
 AFYSIS1 AFY100 with pCB338, pJR4 and pARH
 AFY100-151 AFY100AR with pAV-151
 AFY100-HDJ2 AFY100AR with pGALHDJ2
 AFY100-HSJ1 AFY100AR with pGALHSJ1
 AFYHDJ1 AFY100 with pARU, pYX233hsp40 and pJR4
 AFYgalYDJ1 AFY100 with pGALYDJ1, pARH and pJR4
 AFY34Q/SIS AFY100 with pYQPD, pARH and pCB338
 AFYpAV7 AFY100AR with pAV7
 ACY95cFOA *a ade2 leu2 his3 trp1 ura3 can1 ydj1 :: HIS3*
 ACY95ER *a ade2 leu2 his3 trp1 ura3 can1 ydj1 :: HIS3* with pJR3 and pUCΔSS-ERE
 ACY95pAV7 *a ade2 leu2 his3 trp1 ura3 can1 ydj1 :: HIS3* with pJR3, pUCΔSS-ERE and pAV7
 W3031ER W3031a with pJR3 and pUCΔSS-ERE
 8A7 *α cdc37-34, leu2, lys2, trp1, ura3*
 AFY14 8A7 with pPGKareLacZC and pG1-hAR
 AFY15 AFY14 with pRS315
 AFY16 AFY14 with pRS315CDC37

AFY17	α <i>CDC37</i> :: <i>cdc37-34, leu2, lys2, trp1, ura3</i> with pPGKareLacZC and pG1-hAR
AFY18	AFY14 with pGALCDC37
AFY14-GR	8A7 with pPGKareLacZC and pGN795
AFY17-GR	α <i>CDC37</i> :: <i>cdc37-34, leu2, lys2, trp1, ura3</i> with pPGKareLacZC and pGN795
AFY14-ER	8A7 with pJR3 and pUC Δ SS-ERE
AFY16-ER	α <i>cdc37-34, leu2, lys2, trp1, ura3</i> with pRS315CDC37, pJR3 and pUC Δ SS-ERE
AFY17-ER	α <i>CDC37</i> :: <i>cdc37-34, leu2, lys2, trp1, ura3</i> with pJR3 and pUC Δ SS-ERE
AFY14ABC	α <i>cdc37-34, leu2, lys2, trp1, ura3</i> pABC and pPGKareLacZC
AFY17ABC	α <i>CDC37</i> :: <i>cdc37-34, leu2, lys2, trp1, ura3</i> with pABC and pPGKareLacZC
AFY14GAL	α <i>cdc37-34, leu2, lys2, trp1, ura3</i> with pPGKgal-hAR
AFY17GAL	α <i>CDC37</i> :: <i>cdc37-34, leu2, lys2, trp1, ura3</i> with pPGKgal-hAR

CHAPTER 5

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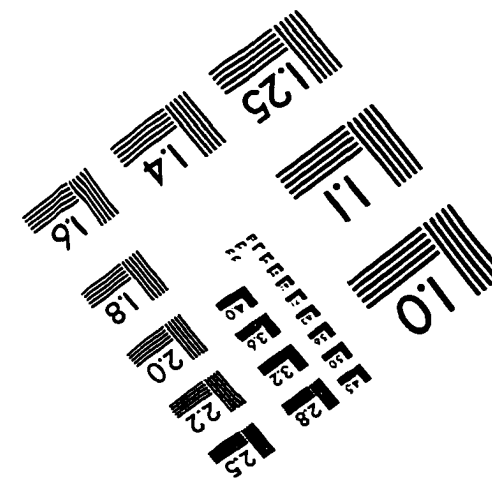
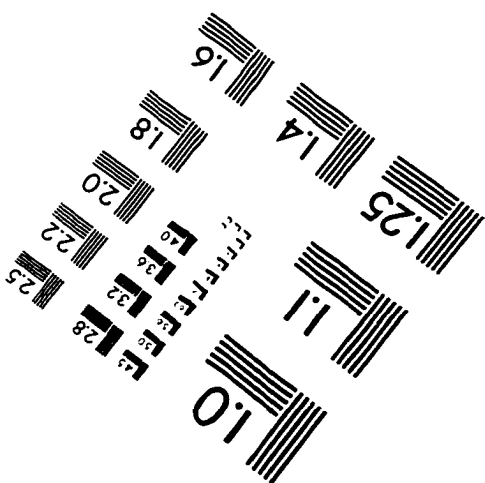
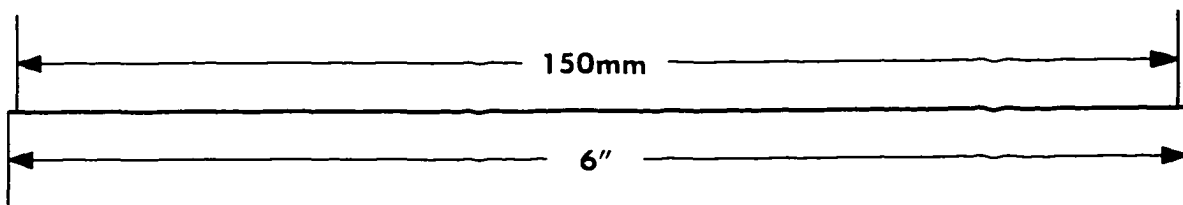
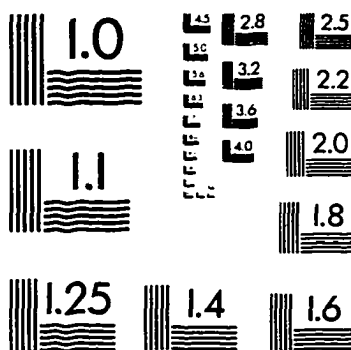
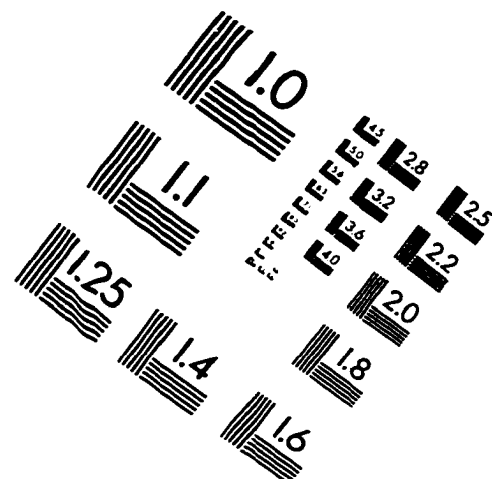
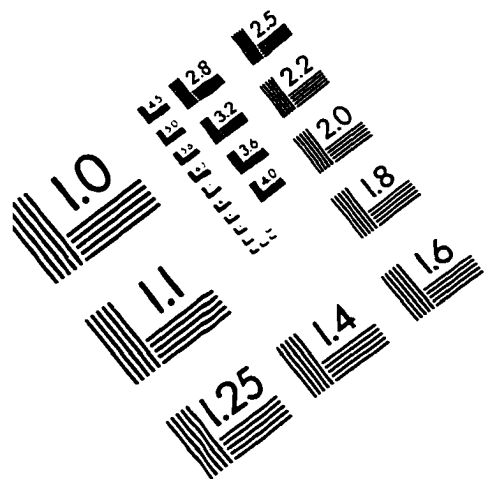
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NONREPLICATING WHITE BEARS AND OTHER IRREPRESSIBLE CAUTIONS

by

PHYLLIS GILDSTON

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

1998

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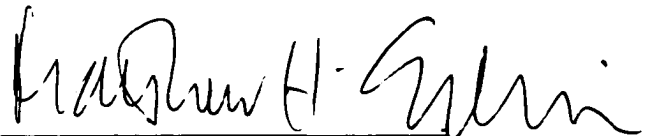
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This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

NONREPLICATING WHITE BEARS AND OTHER IRREPRESSIBLE CAUTIONS

By

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Adviser: Professor Matthew Erdelyi

Three experiments were conducted to test the robustness and generalizability of the rebound and initial enhancement effects. The first study was a close replication of the original "white bear" experiment (Wegner, Schneider, Carter and White, 1987) which uncovered the rebound phenomenon. As they spoke their thoughts aloud in that study, subjects were asked not to think about a white bear for five minutes and then to think about the creature for the next five minutes. Other subjects were asked to suppress thoughts of a white bear but only after first being asked to think about it for five minutes. Thus, order of instruction, to think or not to think, was manipulated to determine if it mattered whether you suppressed thoughts of a target stimulus initially or only later after first being given the opportunity to express thoughts about that target stimulus. The rebound effect refers to an inordinate subsequent preoccupation with any thought that one attempts initially to banish from consciousness. Specifically, after a period of thought suppression, normal subjects had thoughts about white bears more often in the expression period following suppression than a comparison group of subjects who were instructed to express their thoughts about the stimulus immediately after its introduction. Other studies (e.g., Lavy and van den Hout, 1990) have reported finding a contrarian initial enhancement effect, which occurs when the initial suppression group actually has a larger number of the forbidden thoughts during the initial suppression period than does the

initial expression group during its initial expression period. The attempt to suppress deliberately has been tagged as the source of both effects; the more one tries to keep a thought out of mind, the more it will try to insinuate itself—sooner or later. The second and third experiments in the current study used longer, contextual stimuli (one a strange tale from another culture, and the other, a dry prose text). Neither effect was observed in either the replication or extended contextual experiments.

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NON-REPLICATING WHITE BEARS AND OTHER IRREPRESSIBLE CAUTIONS

Introduction

In 1987 Daniel Wegner and colleagues (Wegner, Schneider, Carter and White) published a seminal study on the ironic consequences of deliberate thought suppression. Taking a cue from Dostoyevski who is said to have dared his younger brother NOT to think about a white bear and thereby put him in a state of confusion, Wegner et al. (1987) asked their subjects as they spoke their thoughts aloud not to think about a white bear for five minutes and then to think about the creature for the next five minutes (initial suppression group: S₁-E₂). Other subjects were asked to suppress thoughts of a white bear but only after first being asked to think about it for five minutes (initial expression group: E₁-S₂). Thus, order of instruction, to think or not to think, was manipulated to determine if it mattered whether you suppressed thoughts of a target stimulus initially or only later after first being given the opportunity to express thoughts about that target stimulus.

These researchers (Wegner et al., 1987) uncovered and elaborated an important memory phenomenon, the rebound effect. The rebound effect refers to an inordinate subsequent preoccupation with any thought that one attempts initially to banish from consciousness. Specifically, after a period of thought suppression, normal subjects had thoughts about white bears more often in the expression period following suppression than a second group of normal subjects who were directed to express their thoughts about the target stimulus immediately after the stimulus was proffered.

Wegner et al. (1987) also determined experimentally that intentional suppression is rarely 100 percent successful, although most subjects clearly have the skill to suppress

at will. Other studies (e.g., Lavy and van den Hout, 1990), have reported finding a contrarian initial enhancement effect, which occurs when the initial suppression group (S_1 - E_2) actually has a larger number of the forbidden thoughts during the initial suppression period than does the initial expression group (E_1 - S_2) during its initial expression period. The attempt to suppress deliberately has been tagged as the source of both effects: the more you try to keep a thought out of mind, the more it will try to insinuate itself--sooner or later.

Detecting the rebound effect in the laboratory was certainly a finding of moment since, in one sense, it runs counter to a respected body of research initiated by Ebbinghaus ([1885] 1964). According to Erdelyi (1990), Ebbinghaus' experiments on intentional forgetting were the forerunners of all other research on the directed repression of thought since Ebbinghaus intentionally avoided thinking about the stimulus material. The commonsense conclusion of the experiments Ebbinghaus conducted on himself is that one forgets over time. That finding can also be replicated to demonstrate that there appears to be a pattern to the time-line of retention, which pattern is reflected in the well-known curve of forgetting plotted from Ebbinghaus' table (see Figure 1).

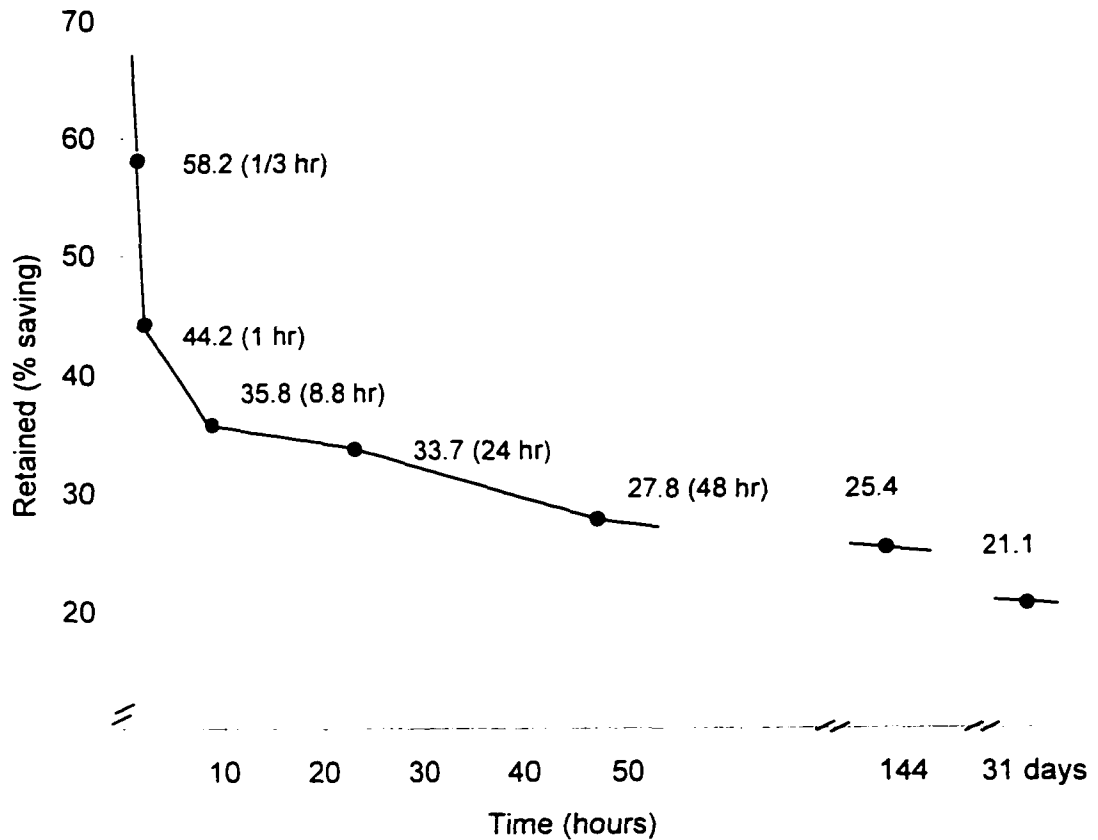


Figure 1. Ebbinghaus's curve of forgetting (plotted from Ebbinghaus [1985] 1964)
 (From Erdelyi, M. E. (1990. *Repression, reconstruction, and defense: History and integration of the psychoanalytic and experimental frameworks*. In J. L. Singer (Ed.), Repression and dissociation: Implication for personality theory, psychopathology, and health (pp. 1-31). Chicago: University of Chicago..)

Ebbinghaus told himself, in essence, not to think about a sizable list of nonsense syllables he had first learned to perfect mastery. Then, in a between-stimulus paradigm, he used equivalent but different lists of nonsense syllable stimuli and retested himself only once on each list at progressively later and later time periods. The percent of the list retained was reduced in each successive time period.

Almost a century later, Erdelyi and Kleinbard (1978) published the results of their study on memory, wherein they came up with a curve of retention which almost mirrored the Ebbinghaus curve (see Figure 2). How could that be?

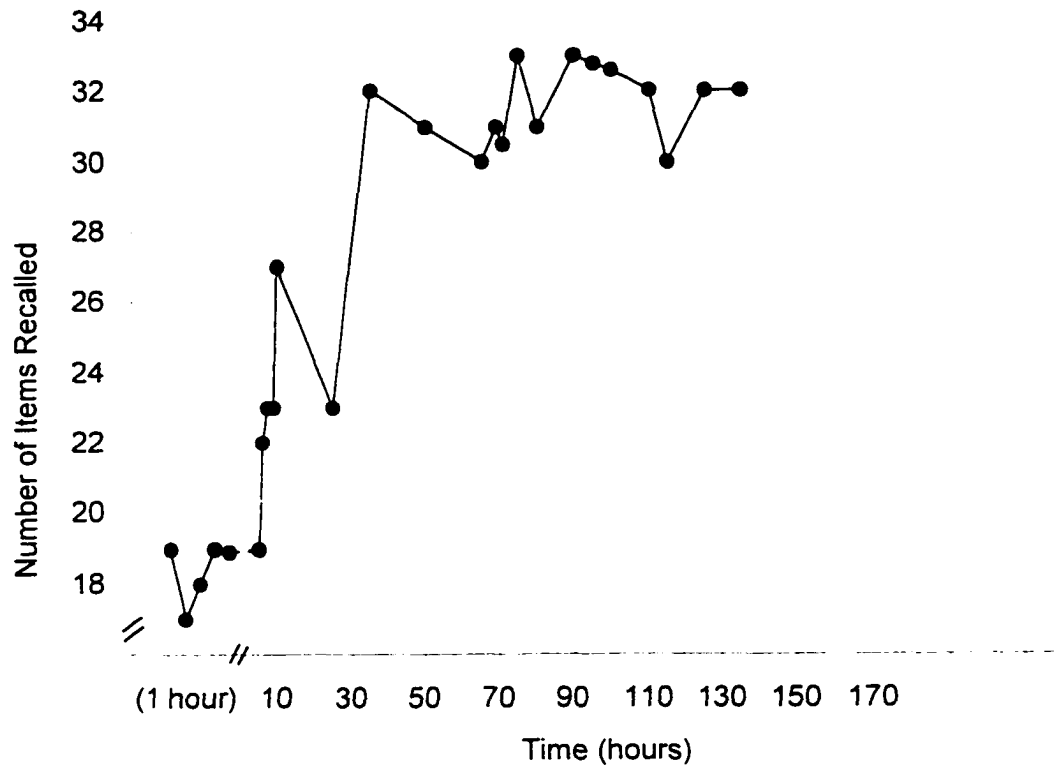


Figure 2. Level of recall over time with repeated testing (Erdelyi and Kleinbard 1978, study 1).

(From Erdelyi, M.E. (1990). *Repression, reconstruction, and defense: History and integration of the psychoanalytic and experimental frameworks*. In J. L. Singer (Ed.), Repression and dissociation: Implication for personality theory, psychopathology, and health (pp. 1-31). Chicago: University of Chicago.)

Erdelyi (1990) considered the possibility that differences in methodology and materials accounted for the uncovering of this opposite but equally repeatable function. Instead of nonsense syllables, Erdelyi and Kleinbard (1978) used meaningful pictures. Instead of single-point testing of equivalent lists they used a multiple testing model, wherein subjects were repeatedly called upon to make every effort to remember the same stimulus list in successive trials over time. Also, unlike Ebbinghaus' one hundred percent initial level of retention, subjects in their study began at a level under fifty percent.

Erdelyi (1990) concludes that:

Retention at any time, as Ballard (1913) demonstrates in his seminal monograph "Oblivescence and Reminiscence," is the balance between two contradictory tendencies of memory, reminiscence and oblivescence (forgetting). A variety of factors can cause this balance (retention) to be either negative, in which case amnesia is observed, or positive, in which case hypermnesia (improvement) is obtained (pp. 2-3).

Erdelyi (1990) goes on to assert that the critical component which differentiates his and Kleinbard's (1978) experiment from those of Ebbinghaus (1885) is not the meaningful picture stimulus, or the use of recall to measure retention, or the low level of initial retention, or even the method of multiple testing on the same materials. He makes that claim because, as he notes, using such materials and methods one will still come up with forgetting curves similar to those of Ebbinghaus. What was essential to his results, he insists, was the directive to think actively about the target stimuli rather than just allow these stimuli to be "left to themselves" [(1885) 1964, 4, 65] and precluded from

"review" [4] as Ebbinghaus had done--and in this instance to think about the stimuli as often and as hard as possible.

Thus, if you avoid thinking about something over a long period of time you become progressively more amnesic for the material even if you make a single effort to retrieve it every time you lift the no-think ban at progressively later and later times. But intensive and repeated efforts to retrieve the same information, even after forgetting has occurred, can ultimately produce hypermnesia (Erderlyi and Kleinbard, 1978).

How does the rebound effect uncovered by Wegner et al (1987) fit into this complex framework of laboratory data? If one is asked first not to think about a stimulus and time passes, you would expect that some forgetting would occur so that when the subject is then asked to think about that same stimulus he might have even fewer thoughts than if he had been allowed to express those thoughts initially. Expressing one's thoughts about a stimulus immediately after being exposed to it would appear to lead to a greater number rather than a fewer number of thoughts about that stimulus than if one has to wait a period of time before finally expressing such thoughts. The rebound effect is thus the opposite of what one would expect a la Ebbinghaus.

We are left with a puzzle. Wegner and colleagues (1987) have attempted to explain it by reference to a negative cueing hypothesis. Being told what to avoid thinking about has two important sequential effects. First, it sets up a mental set wherein it is hard to follow the instruction. How can you not image, at least initially, a purple cow or a white bear when you are told not to? Second, once the effort to block the image or thought is engaged and there is nothing specific to focus one's thoughts on instead, one has to distract oneself to bar the forbidden thought from mind. The difficulty with most

self- distraction, they claim, is that it is often scattered, arbitrary, and (or) related to environmental cueing. As the subject searches for distractions, for example, items in the immediate environment may attract attention momentarily, allowing the unwanted thought to pop up more frequently in the same environment during a period free of the need to suppress. This paradoxical effect occurs because those items functioning as distractions during the suppression time-interval become discriminative stimulatory cues in the subsequent expression period.

Some support was afforded this notion of negative cueing in a later study by Wegner and colleagues (Wegner, Schneider, Knutson, and McMahon, 1991) which resulted in the rebound effect only when the same set of pictorial slides was displayed in both the suppression and expression periods, creating, purportedly, similar cueing environments. (Ironically, however, this finding, which tends to support Wegner et al.'s (1987) theory to explain the rebound effect, is, simultaneously, an experimental refutation of the generalizability of the rebound effect.)

When given the negative cue to avoid thinking about something, one must search for distractors and in that search one chances upon numerous different networks that may lead back to the to-be-avoided thought. Because one's thoughts jump from topic to topic without focus--thereby activating and connecting so many disparate neurological webs--it is more likely that a negatively cued thought will wiggle its way in every now and then despite one's attempts to suppress it.

Secondly, not only does negative cueing make it hard fully to accomplish the suppression task (in the suppression period) but, once the directive to suppress the thought is shifted to encourage entertaining the thought (in the expression period), the

negative cueing from the preceding suppression period leads to carry-over of the large number of disconnected networks associated with the thought, increasing the likelihood that thoughts about the previously shunned topic, image or information package will flow more copiously.

Such might not be the case if one is given a positive cue. A positive cue--the directive to think about something specific--sets up a relatively more circumscribed network of associations upon which one can concentrate, whereas a negative cue leaves one floating in a sea of related networks. In a separate experiment, Wegner et al. (Experiment 2, 1987) demonstrated that providing subjects with a single focused distractor (in this case the directive to think about a red Volkswagon whenever the thought of a white bear came to mind) to replace the unwanted thought, eliminated the rebound effect. The results of that experiment gave strong support, according to Wegner et al (1987), to the negative cueing hypothesis. On the other hand, the effect may be viewed as more qualified, raising questions about overall reliability.

Methodological Issues in the Rebound Effect

The Stimulus.

Despite their positive findings, Wegner et al. (1987) admitted that it is not known whether the rebound effect generalized to stimuli other than white bears. They state: "The nature of the thought being suppressed--whether it is emotional or not, easily imagined or not, familiar or not, complex or not, and the like--would seem to be an important determinant of suppression effects (p.12)."

It is noteworthy that "white bear" has no particular personal salience for young adults living in an urban environment. Nevertheless, it must be acknowledged that this

simple stimulus is imagistic and somewhat of a novelty and may thus take on sufficient salience to rebound.

It is not only stimulus type which may be of importance to the issue of generalizability but also the amount of information embedded in the stimulus. The stimulus "white bear," for example, evokes a single unitary image from just two words. Such a single- item "list" is not very difficult to remember--especially for the short period covered by the experiment. Two words--or one chunk--fit very comfortably into Miller's (1956) seven chunks of information that humans are able to handle with ease, whereas long lists of nonsense syllables or meaningful visual stimuli or stories involve more than seven clusters of information, plus or minus two.

Confounds in the Experimental Design.

There is also a methodological problem with Wegner et al.'s (1987) experimental design. In the original study instructions to suppress (S) were followed by instructions to express (E) for subjects in one condition (S_1 - E_2) whereas instructions were given in the reverse order to subjects in the second condition (E_1 - S_2). The rebound effect was thus observed when comparing E_2 versus E_1 , i.e., the number of reported thoughts about a white bear in a second 5- minute expression time-block (minutes 6 through 10) with the number of reported thoughts about a white bear in a first 5- minute expression time-block (minutes 1 through 5.) Because Wegner et al.'s (1987) original study confounds time periods compared (E_2 versus E_1), order of testing rather than suppression-expression activity could conceivably underlie the rebound effect.

Variations and Issues in Past Efforts at Replication

The Experimental Design

Regardless of whether experiments designed to replicate Wegner et al. (1987) found for or against the rebound or initial enhancement effect, most suffered from the same confounds in time-interval comparisons as the ground-breaking study. Furthermore, most of the studies using duplicative 5-minute experimental blocks had preliminary or intervening tasks which make it difficult to speak of true replication: five minutes of relaxation instead of practice prior to manipulation (Merckelbach, Muris, van den Hout and de Jong, 1991); the intervention of an adjective check list after the practice period and before the first experimental trial (Roemer and Borkovec, 1994); a search for a naturally occurring intrusive thought and then a questionnaire evaluating its anxiety level prior to the first manipulation and then another questionnaire following it (Salkovskis and Campbell, 1994); questionnaires, scales and an interview on smoking, the to-be-suppressed topic, prior to the first experimental interval and an evaluating questionnaire subsequent to it (Salkovskis and Reynolds, 1994); reading and rating stories with and without emotional wording before the initial experimental period, and slide viewing for 20 minutes prior to the second (Muris, Merckelbach, van den Hout and de Jong, 1992); accompanying the experimental blocks with mood music (Howell and Conway, 1992) or a slide show (Wegner et al., 1991); the completion of evaluative visual analog scales following the first manipulated interval (Zeitlin, Mitten and Hodder, 1995).

Additionally, a number of studies of the rebound and initial enhancement effects had varying time-blocks: two 2-minute periods (Clark, Ball, and Pape, 1991; Clark, Winton and Thynn, 1993); thirteen 3-minute blocks (Wegner et al., 1991, Experiment 1); 4-minute time intervals (Wegner, Shortt, Blake, and Page, 1990); two 9-minute blocks (Wenzlaff, Wegner, and Klein, 1991; Kelly and Kahn, 1994); two 5-minute and

one 15-minute manipulated periods (Mathews and Milroy, 1994); two 30-minute blocks (Tinder and Salkovskis, 1994); one year (Haaga and Allison, 1994).

Several of the above studies had a practice period of varying lengths prior to the first manipulated period (e.g., Clark et al., 1991 [2 minutes]; Wegner et al., 1987 [5 minutes]. 1990 [3 minutes]) while others had none (e.g., Wenzlaff et al., 1991). Preceding and interposed tasks were equally varied for some of the studies cited, and included such activities as completing self-rating forms and questionnaires, unscrambling anagrams, and discussing attitudes about the to-be-forbidden topic.

Problems of replication may thus hinge on small differences in experimental design which feature mismatches in time-block comparisons, variations in length of experimental trials, and the interpolation of potentially confounding tasks.

The Stimulus

Experiments that have been characterized in the literature as "replicating" have used the same stimulus as Wegner et al. (1987), i.e., "white bear," and (or) different stimuli. With respect to differing stimuli, some major areas to consider in these studies are the experimental effects of: (a) length (b) complexity (c) nature: (1) high versus low imageability; personally relevant versus personally irrelevant; (3) emotionally charged versus emotionally neutral; (4) interesting versus boring; (5) negatively valenced versus positively valenced; (6) abstract versus concrete; (7) novel, experimenter-provided thoughts versus personal intrusive thoughts.

The same stimulus. Comparing the number of experiments which successfully replicated the rebound effect when using the exact stimulus, "white bear," as that used in the seminal and often cited Wegner et al. (1987) study, with the number of experiments

that failed to replicate the effect (including studies by Wegner and colleagues), the non-replicating studies appear to equal or perhaps even outnumber the positive replicating studies.

Four experiments replicated the rebound effect for certain experimental groups, sometimes only under certain conditions. Kelly and Kahn (1994) replicated under the same conditions as Wegner et al. (1987), and Wenzlaff et al. (1991, Experiment 1) replicated for subjects experiencing both mood congruent and mood incongruent periods with an enhanced rebound effect in the mood congruent period. The other two replications were qualified: Wegner et al. (1991) only for subjects who, in both experimental periods, were presumed to be experiencing parallel mind-sets said to be induced by the second showing of slides viewed earlier: Rutledge, Hollenberg, and Hancock (1993, Experiment 2) only for subjects divided post hoc into two groups on the basis of a third, moderator variable.

Only one experiment (Conway, Howell, and Giannopoulos, 1991), using the same stimulus, "white bear," found an initial enhancement effect (in the last minute of a 5-minute suppression period). The rebound effect was not addressed in that study.

In contrast, four studies using the "white bear" stimulus have failed to obtain with normal subjects either the rebound or initial enhancement effect: Merckelbach et al. (1991); Rutledge et al. (1993, Experiment 1); Wegner et al. (1987, Experiment 2) for the initial suppression group given a specific distractor to focus on when the forbidden thought came to mind; Wegner et al., (1991) wherein they obtained only a marginal rebound effect ($p < .06$) when the "mind's environment," conditioned by a series of slides,

was different in the two experimental periods. One must thus consider the possibility that the results of the original experiment by Wegner et al. (1987) are not reliable.

Considering the findings which did not confirm the rebound effect in particular, we may conclude that Ebbinghaus' (1885/ 1964) observations apply. Indeed, almost every study which analyzed minute by minute shifts in the number of target thoughts expressed within experimenter manipulated time periods, whether those periods were periods of suppression or expression, uncovered a significant main effect for a continuing decline in such thoughts over time (Howell and Conway, 1992, Experiment 2, except for a small rebound in the last minute of a 5-minute suppression interval for subjects in the negative target condition; Merckelbach et al., 1991; Muris et al., 1992; Wegner et al., Experiment 1, 1987, for all groups except for the final minute in the expression period following suppression for the initial suppression group; Wegner et al., 1990).

Differing stimuli. Differing stimuli fared no better than the "white bear" stimulus with respect to consistency of results among numerous studies. A few studies with widely varying stimuli obtained the rebound effect: a vivid story about a girl and a rabbit (Clark et al., 1991, 1993); a supposedly neutrally worded story about real-world events (Muris et al., 1992); the same story as previously described which was, in this case, negatively worded, with the rebound effect proving to be significant only for depressed subjects (Wenzlaff, Wegner, and Roper, 1988); thinking about an old cold-flame--a former boy or girlfriend who was no longer desired--but not a hot-flame (Wegner and Gold, 1992); a small, black, life-like model of a spider exposed to spider phobics for 30 seconds (Zeitlin et al., 1995).

On the other hand, a number of studies also employing widely differing stimuli failed to obtain the rebound effect: a personally irrelevant but emotionally worded story about real-world events (Muris et al., 1992); thoughts about sex as well as about supposedly less exciting subjects (Wegner et al., 1990); personally relevant intrusive thoughts (Kelly and Kahn, 1992, 1994); a self-generated real-life worry (Mathews and Milroy, 1994); naturally occurring negative intrusive thoughts (Salkovskis and Campbell, 1994); the emotional content of a past significant loss or an anticipated situation involving criticism or rejection (Roemer and Borkovec, 1994); intrusive thoughts about smoking (Salkovskis and Reynolds, 1994).

Turning from studies focused on the rebound effect to those concerned primarily with the ability to suppress, Lavy and van den Hout (1990) were among the very few researchers to find an initial enhancement effect and they found it for the supposedly impersonal, neutral but less unusual stimulus, "vehicles." They did not even attempt to assess the rebound effect. Salkovskis and Campbell (1994) also found, for smokers trying to suppress thoughts about smoking, an initial enhancement effect (after "correcting" their statistics for a ceiling effect) but no rebound effect. Tinder and Salkovskis (1994) studied personally relevant negative intrusions outside the laboratory and found a type of enhancement effect for the group asked to suppress such thoughts over four days. The rebound effect was not addressed. Finally, Bowers and Woody (1996), using the stimulus of a personal favorite (dream) vehicle, claimed to have replicated Wegner et al.'s, (1987) "paradox of intentional forgetting"--or so they implied in the title to their article. Since neither the rebound or initial enhancement effect was assessed in their experiments--which had a series of four (Study 1) and three (Study 2) 2-

minute suppression periods wherein subjects were able to suppress, albeit imperfectly-- their findings are more applicable to supporting the notion that hypnotic amnesia aids in the task of suppressing thoughts than in replicating the findings of Wegner et al. (1987).

It is of considerable interest that the study's (Bowers and Woody, 1996) initial plan was to use "white bear" as the stimulus but "preliminary data...did not generate as many intrusions as anticipated" (p.382, footnote 1). The authors continue, in the footnote, to state: "We decided that it would be better to use as the target thought something that was intrinsically interesting or compelling."

In sum, stimuli different from "white bear" in, for example, length, content, relevance, interest level, degree of abstraction, etc., produced equally conflicting results for both the rebound and initial enhancement effects.

Methodological Differences

Professedly replicating studies of the rebound and initial enhancement effects have differed considerably not only in experimental design and, frequently, in the stimulus used, but also in methods and procedures. To clarify the issue, the most important variables to review are the wording of instructions, the manner of accessing thoughts, the procedure(s) used for counting target thoughts, and the environment within which the experiment takes place. Some of these methodological differences have, themselves, been subjects of experimentation.

Instructions. One of the issues that comes up repeatedly in the discussion sections of experiments on thought suppression is the impact of different instructions on outcomes. Wegner et al.'s (1987) expression instructions ("...try to think about a white bear" [p. 7]) were criticized (Lavy and van den Hout, 1990; Merckelbach et al., 1991),

for example, for being "forced" and thus unnatural. Hence a number of studies (Clark et al., 1991, 1993; Lavy and van den Hout, 1990; Merckelbach et al, 1991; Muris et al, 1992; Salkovskis and Reynolds, 1994) "liberalized" the instructions ("...you can think about anything including a white bear [or whatever the stimulus might be]") to make the instructions more akin to everyday life. Liberalizing the instructions did not lead to uniformity of results, however.

Muris et al. (1993) proposed that even the wording of instructions in the practice period may tilt results. Pope's (1978) instructions on how to verbalize one's stream of consciousness (used in the practice period of many of the studies reviewed), mentions both internal and external cues but many more internal items. If other examples are added to the list, their focus--internal or external--might significantly affect the strategies used in subsequent experimentally manipulated periods.

The major variations among expression instructions are: (a) subjects are directed to focus on the target thought (Wegner et al., 1987; Wenzlaff et al., 1991); (b) subjects are permitted to think about anything, including the target thought if they so choose (Lavy and van den Hout, 1990); (c) subjects are asked to simply notice and report when the target thought happens to occur (Salkovskis and Campbell, 1994); (d) subjects are given freedom to have their minds wander where they will (Mathews and Milroy, 1994) while probes for subjects' thoughts are generated at specific but unpredictable intervals; (e) subjects are given the freedom to think about anything at all with no restrictions after being exposed to a stimulus (Clark et al., 1991).

A similar variability is found in the wording of suppression instructions: (a) subjects are directed to try to suppress the target thought (Wegner et al., 1987, 1991;

Wenzlaff et al., 1991); (b) subjects are asked to suppress the target thought but to make no attempt to focus on anything else in particular (Clark et al, 1993; Lavy and van den Hout, 1990; Salkovskis and Campbell, 1994); (c) subjects are told to suppress the target thought by focusing on some other specific thought or thought complex generated by the subject (Salkovskis and Campbell, 1994); (d) subjects are requested to suppress the target thought by focusing on an externally provided distractor (e.g. every time you think of a white bear, despite your attempt to keep the thought at bay, think of a red Volkswagon instead [Wegner et al., 1987]); (e) subjects are directed to engage in a specific activity of distraction (e.g., breathing exercises taught prior to the experiment) whenever the target thought comes to mind (Salkovskis and Reynolds, 1994); (f) subjects are given a 9-digit or a 2-digit number to rehearse (the memory for which is to be tested subsequently) while attempting to suppress the target thought under this increased cognitive load (Wegner and Erber, 1992); (g) subjects are encouraged to finish as much as possible of a test (Salkovskis and Reynolds, 1994) or task (Wegner and Erber, 1992. Experiment 1) while they suppress the target thought.

Unfortunately, the picture is unclear as to exactly how different instructions may contribute to the conflicting morass of results on experiments designed to test the reliability of either the rebound or initial enhancement effect.

Accessing thoughts. One may ask what is the optimal method for accessing thoughts in general. Is it better to have subjects utter their thoughts aloud or write them down? Do we need to access all thoughts within a specified time-interval or just the target thoughts in which we are interested? If we elect to do the latter, what is the most accurate way to get at those target thoughts?

Howell and Conway (1992), for instance, say that their think-aloud task is more spontaneous and thus potentially less rehearsed and less organized than attempting to write down one's thoughts. In fact, they point to this methodological difference as an explanation for why their depressed subjects had more positive intrusive thoughts after induction into a positive mood via music (as well as more negative intrusive thoughts after induction into a negative mood), whereas the depressed subjects in the Wenzlaff et al. (1991) study were only significantly influenced by mood music in a period of suppression when the thought was negative. They believe that the written format in the Wenzlaff et al. (1991) study may be less sensitive than the oral, and thus only reveal effects when they are stronger.

To give another example, Salkovskis and Campbell (1994) had their subjects click a counter every time they had the target thought. They justified their decision not to allow simultaneous verbalization of thoughts by stating that the use of a counter requires less effort and hence less of a cognitive load than does thinking aloud--which task may burden subjects with the obligation to allow no silences.

The procedures used in the replicating studies are: (a) directing subjects to speak their thoughts aloud (e.g., Clark et al., 1991, 1993; Conway et al., 1991; Lavy and van den Hout, 1990; Muris et al., 1993; Rutledge et al., 1993; Wegner et al., 1987, 1990, 1991); (b) directing subjects to write down their thoughts (e.g., Kelly and Kahn, 1994; Wenzlaff et al., 1988, 1991); (c) directing subjects to answer questionnaires about their thoughts (e.g., Roemer and Borkovec, 1994; Salkovskis and Campbell, 1994); (d) directing subjects to characterize the nature or extent of their thoughts on a scale (e.g., Clark et al., 1991, 1993; Howell and Conway, 1992).

Some of these varying procedures have themselves been selected for study to determine if they might differentially affect experimental results. Subjects in Wegner et al.'s (1987, 1991) and Clark et al.'s (1991) studies, for example, rang a bell to signify the occurrence of the target thought as they spoke their thoughts out loud into a microphone. In the experiments by Wenzlaff et al. (1988, 1991), check marks replaced bell rings and written stream-of-consciousness reporting substituted for oral verbalizations. Check marks were included "to catch any reportable thoughts that happened too quickly for written acknowledgment" (Wenzlaff et al., 1991, p. 501).

Two studies (Shackelford, Wegner, and Schneider, 1987; Wenzlaff et al., 1988) addressed the issue, the first experimentally and the second by reference to results. Both concluded that it is unlikely these differences in methodology are significant.

Muris et al. (1993) compared verbalization with silent thinking. Earlier experiments performed at Limburg University in the Netherlands (Merckelbach et al., 1991, Muris et al., 1992) had merely asked subjects to press the button of an event marker whenever the target thought came to mind. Muris et al. (1993) hypothesized that thinking aloud might provoke subjects to shift the focus of their attention to items in the immediate environment. In addition, subjects may feel they must continue to verbalize as they try to suppress the target thought. The easiest path to take in order to comply with that instruction might be to describe non-target objects in the environment. No differences attributable to one method or the other were uncovered in their experiment nor was a rebound or initial enhancement effect found for either method.

Counting target thoughts. Another variable procedure is the manner of counting and (or) evaluating intrusions and expressions of the target thought once it is presumed to

be accessed: (a) Subjects are told to ring a bell and the number of rings is tallied (e.g., Howell and Conway, 1992; Rutledge et al., 1993; Wegner et al., 1987); (b) subjects are directed to press an event marker or golf counter and the number is noted (e.g., Merckelbach et al., 1991; Muris et al., 1992, 1993; Salkovskis and Campbell, 1994; Salkovskis and Reynolds, 1994); (c) subjects are directed to make a checkmark on paper and the marks are counted (Kelly and Kahn, 1994; Wenzlaff et al., 1988, 1991); (d) subjects are instructed to talk into a tape recorder and experimenters subsequently listen to the tape, code mentions of the target thought, and then sum them (e.g., Clark et al., 1991, 1993; Howell and Conway, 1992; Lavy and van den Hout, 1990; Muris et al., 1993; Rutledge et al., 1993; Wegner et al., 1987, 1990, 1991); (e) subjects are directed to write down their ongoing thoughts which experimenters subsequently read, code and sum (e.g., Kelly and Kahn, 1994; Wenzlaff et al., 1988, 1991); (f) subjects are instructed to jot down a word or phrase to identify the thought of the moment at computer prompted intervals and, after the experiment, categorize the thought with the experimenter (Mathews and Milroy, 1994).

When experimenters code mentions of the target thought, one may query how accurate is their assessment. This issue has not been addressed in most of the published studies. In periods of suppression, one may also question the precision of the correlation between the target thought and subjects' bell-rings, counter-clicks or check-marks. As Muris et al. (1993) correctly noted, one must always consider the possibility that self-reports on cognitions could be unreliable. Subjects must be able to identify the sometimes fleeting intrusion of the thought they are trying to suppress; they must be

willing to signify its occurrence; they must be cooperative in the experimental task.

Subjects might fail on any or all of these requirements.

The test environment. The environment within which the experiment takes place also shifts considerably from study to study. Could this variable be of significance? As reviewed earlier, Muris et al. (1993) suggested that, when thinking aloud with their eyes open, subjects may describe non-target items in the immediate environment in an effort to suppress the target thought. Although Muris and colleagues (1993) did not themselves find either a rebound or initial enhancement effect, they postulated that, since subjects typically remain in the same room for both the suppression and expression periods, external environmental cues may trigger more target thoughts for externally oriented subjects (a call to individual differences) in the expression period following suppression. They thereby attempted to provide some explanation for the rebound effect found in other studies.

The only significant finding in the Muris et al. (1993) study related to a post hoc analysis of the data. That is, on a post-experimental task concerned with recognizing which objects were actually in the laboratory during the preceding experiment, the half of the subjects who were most accurate compared with the half scoring lowest, had more thoughts about white bears in both the suppression and expression periods.

The studies reviewed had the following variety of environments: (a) A relatively bare environment with purportedly no salient visual or auditory distractors (e.g., Clark et al., 1991, 1993; Mathews and Milroy, 1994; Merckelbach et al, 1991; Roemer and Borkovec, 1994; Salkovskis and Campbell, 1994; Salkovskis and Reynolds, 1994); (b) an environment with purposefully located salient distractors (Muris et al., 1993); (c) an

environment with all possible external visual cues removed (subjects keep their eyes closed) (Lavy and van den Hout, 1990); (d) a sound-manipulated environment such as playing music selections of differing tempi, style, taste, etc. (e.g., Howell and Conway, 1992; Wegner et al., 1991); (e) an environment without other people (e.g., Clark et al., 1991, 1993; Howell and Conway, 1992; Lavy and van den Hout, 1990; Mathews and Milroy, 1994; Roemer and Borkovec, 1994; Rutledge et al., 1993; Salkovskis and Campbell, 1994; Salkovskis and Reynolds, 1994; Wegner et al., 1987, 1990, 1991; Wegner and Erber, 1992); (f) an environment with only the experimenter and one subject (Kelly and Kahn, 1994, with the experimenter behind a partition); (g) an environment with several subjects and an experimenter (e.g., Wenzlaff et al., 1988, 1991).

Subject Differences

Individual differences may explain some of the inconsistencies among thought suppression studies. Characteristics which appear to be key to a better understanding of the topic are characterological repressiveness, hypnotizability, anxiety/worry/obsession, depression, and other experimentally identified variables unique to certain individuals.

Characterological repressiveness. The topic at hand is intentional suppression/repression of thoughts, and in line with Erdelyi's (1993) analysis, no distinctions will be made between the terms. It seems logical, therefore, to search out a personality style which typically engages in such behavior. Indeed such a personality style has been identified, and classified as "repressiveness." The assumption is that repressors are so intent upon avoiding the negatives in life that they sharply limit self-awareness and develop, over time, a style of processing information labeled "perceptual cognition." wherein they repeatedly and fervently eschew reflecting on negative events,

thoughts and feelings by distracting themselves with external events in a superficial and capricious manner (Bonanno & Singer, 1993). They may reject such negatively perceived data consciously or at the stage of preattentive processing (Bonanno and Singer, 1993). One consequence is that they encode the information poorly and thus find it hard subsequently to retrieve it (Bonanno & Singer, 1993; Johnson, 1992). When asked to remember unpleasant experiences from early childhood, for example, they typically have difficulty (Davis & Schwartz, 1987). In fact they have fewer childhood memories altogether (positive memories are forgotten as well) than do non-repressors (Davis, 1990).

Repressors are stoics, rarely complaining of anything. Repressors' cognitive formulations of the bad elements in their lives may be vague and fleeting but, like hysterics, they apparently encode the affective impact of negative events somatically. Several investigators have found that, despite the defensive coping maneuvers of distraction and avoidance, repressors have more stress-related somatic signs and symptoms than non-repressors (Bonanno & Singer, 1990; Weinberger, 1990). At the time of repression they evince stronger bodily reactions (i.e., greater skin resistance and forehead muscle tension), although they report considerably fewer negative affective responses to disturbing stimuli (Bonanno and Singer, 1990, 1993; Weinberger, Schwartz, & Davidson, 1979). Untoward effects on health are possible sequelae (Dattore, Shontz & Cayne, 1980; Jensen, 1987). Clearly success in suppressing thoughts for repressors may be a matter of winning the battles but losing the war. Oddly, there have been no studies examining for the rebound effect in either repressors or hysterics.

Hypnotizability. It is possible that individuals who achieve high scores on tests of hypnotizability may, like repressors, find it easier to suppress unwanted thoughts, but only when they are subjected to suggestions for amnesia in hypnosis (Bowers and Woody, 1996). Bowers and Woody (1996) admit that, when considering the role of hypnotic prowess which, statistically, appears to facilitate thought suppression, even subjects with excellent trance skills vary widely in the capacity to suppress. In a strange non sequitur, they cite their results as confirmation of Wegner's (1994) theory that conscious efforts to control one's thoughts necessarily lead to a monitoring process which cycles the unwanted thought back into consciousness more frequently than if no conscious cognitive efforts were put forth to suppress it. Yet they made no experimental attempt to assess the rebound effect even though they give the impression in the title and text of their article of having replicated the "paradoxical" phenomenon.

Anxiety/worry/obsession. In contrast to repressors, we can take a look at the personality styles characterized primarily by perceptive vigilance or reflective cognition (Bonanno & Singer, 1993; Johnson, 1992; Singer & Bonanno, 1990). Chronically high-anxious individuals, formerly characterized by Byrne (1961) as "sensitizers," react in exactly opposite fashion from repressors when confronted with threatening stimuli. They attend intently to such stimuli. Initial perceptual vigilance fades into memory loss over time, however, purportedly because further cognitive processing is aborted, in the manner of a defense mechanism, to protect from further hurt (Mogg, Mathews & Weinman, 1987). There are thus both similarities and differences between repressors and the high anxious. Again, however, no studies to assess the possible existence of a rebound or

enhancement effect have been undertaken with clinically diagnosed high-anxious individuals.

Chronic worriers lie somewhere on a continuum between Generalized Anxiety Disorder (GAD) and normal functioning. Worry itself has been tagged as one of the pair of primary diagnostic features of GAD, the other half being excessive anxiety itself (DSM-IV, American Psychiatric Association, 1994).

Comparing the effects of the priming and suppression of worry in high and low middle-aged worriers. Mathews and Milroy (1994) come to conclusions that are very different from and, in fact, contrary to the findings and conclusions of Wenzlaff et al. (1988) and Wegner et al. (1990) that "...thought suppression may be a necessary part of the development of phobia, panic and inappropriate anxiety" (p.417). Mathews and Milroy (1994) suggest that the opposite may be the case. They contend that the weight of the evidence shows that "attempts to prevent oneself from worrying are not harmful and help to decrease both distress and later intrusive worrisome thoughts" (p.844).

In their experiment, Mathews and Milroy (1994) found that high worriers had somewhat more neutral or pleasant thoughts after suppressing than after expressing a specific worry. They cite a study of treatment outcomes for worriers (Borkovec, Wilkinson, Follensbee and Lerman, 1983) wherein the results support their own findings. Summarizing their position, they state that, since a period of suppression had so little effect on the subsequent frequency of worrisome intrusive thoughts for their high worry subjects (i.e., there was no rebound effect), "it makes implausible the suggestion that voluntary attempts at suppression are responsible for the intrusive quality of worry, as postulated by Wegner and colleagues in their discussion of anxiety disorders (e.g.,

Wegner et al., 1990)" (p. 849). Another experiment (Metzger, Miller, Cohen, Sofka and Borkovec, 1992) also found that letting the mind wander and not focus on worrisome topics had psychological benefits.

Wegner et al. (1987) also concluded from their research that suppression results in obsession for unwanted thoughts, even for normals. The rebound effect is described by them as a laboratory analogue of clinical obsession since it implies more involvement with the thought after suppression than if one made no attempt to suppress.

Merckelbach et al. (1991) partially replicated Wegner et al.'s (1987) study because they mistrusted Wegner et al.'s (1987) generalization of findings to obsessives. They were not able to replicate the rebound effect. Yet, despite that fact, they assumed the reliability of Wegner et al.'s (1987) results, and thus attempted to explain them in light of their own findings. Their conclusion was that the rebound effect does not model obsessive thought and that the original finding was possibly the product of an artificial, forced set of expression instructions. They neglected to suggest, as they well might have, that the effect found by Wegner et al. (1987) could be unreliable.

In spite of the widespread theorizing in studies on thought suppression about the implications of the rebound effect for obsessive thinking and obsessives, no experimental studies of the phenomenon have been performed directly with this clinical sub-population.

Depression. Although depression is a state almost everyone experiences from time to time, relatively normal depressed individuals can be distinguished from depressives or manic-depressives (Cf. Coyne, 1994).

According to some researchers (Wenzlaff et al., 1988; Wenzlaff, 1993), depressives' attempts to distract themselves typically result in replacing one negative thought with another, primarily because negative thinking is salient for them. Because networks of negative thoughts are interconnected, the unwanted thought rebounds after suppression, coming back to mind more frequently than if it had not been suppressed.

Wenzlaff (1993) garnered support for his theory from an earlier finding he and co-workers had of a rebound effect for depressed subjects who were dealing with negative intrusive thoughts related to an experimenter-provided negative situation in which they were to imagine themselves (Wenzlaff et al., 1988). He concluded (1993) that the clinically depressed should abandon thought suppression altogether.

The theory was indirectly strengthened by an experiment (Conway et al, 1991) on positive versus negative feedback in normals and dysphorics. During a 5-minute experimental suppression interval in which subjects were to try not to think about the test they just took, dysphorics, in contrast to normals, were found to exhibit significantly more negative intrusions if they had been informed that they had failed the test (which negative feedback was random and not actually related to the test) and fewer positive intrusions if informed that they had done much better than average.

In sum, the small literature on depression and depressives with respect to thought control suggests that they may be less successful in suppressing dysphoric content and also, perhaps, more likely to experience the rebound effect for such thoughts.

Other individual differences. Most of the experiments cited have been performed in college laboratories with college students. One particularly interesting study (Rutledge, et al. 1993) uncovered a moderator variable that appeared to account for the

differences between those subjects in the experiment who produced rebound and those who did not. Rutledge et al.(1993) at first found no rebound effect and no initial enhancement effect using two different stimuli, the thought of a white bear and the thought of a test the students were to take two days hence. The latter finding confirmed the results of Rutledge and Alvarado (1991) which also used an upcoming test as a more ecologically meaningful stimulus (than a white bear) with which to verify the rebound effect.

The Rutledge et al. (1993, Experiment 1) study was an exact replication of the Wegner et al. (Experiment 1, 1987) experiment in every detail. What differed was the type of institution from which the subjects were drawn. Lincoln University (in Jefferson City, MO) has an open-admissions policy, whereas the subjects from the "Wegner" studies were drawn from highly competitive institutions. Thus Rutledge et al.(1993) elected to look at the differences in admissions criteria for the respective institutions, hoping to find a moderator variable that might explain the inconsistencies among findings. They ultimately found (Experiment 2) that the small number of subjects who performed extremely well on the math component of the American College Testing (ACT) Assessment Program Scales were also those subjects who evidenced a 50% or better increase in white bear thoughts relative to the number of such thoughts the same subject entertained about white bears in a baseline period of expression. These subjects were labeled "rebounders."

The authors (Rutledge et al., 1993) point out, however, that a most important result of their study was the relatively small number of rebounders. Only 16 of 84 subjects fell into the "rebounder" category. Rutledge et al. (1993) call into question the

universality of the rebound effect and highlight the likelihood of individual differences for the phenomenon.

Another consideration offered by Rutledge et al. (1993) is that the single moderator variable they uncovered for the rebound effect appeared to be related not to overall scholastic ability but to a circumscribed and relatively narrow cognitive domain, possibly centered, they theorized, in keen visualization or visual memory skills that could logically be associated with the math subtest. They speculated further that good visualizers may have more trouble than most in suppressing the image of a white bear and they may, perhaps, be found in greater numbers in Trinity University, the source of the subject pool for Wegner et al.'s (1987) experiment.

In conclusion, it seems reasonable to suggest that the ability to suppress/repress as well as the consequences of attempting to do so--including a possible rebound--could well be related to individual differences. It could be that there is a negative correlation between different classes of subjects. Repressors, the highly hypnotizable, and run-of-the-mill worriers may excel in suppression with positive consequences for all but the repressors. Depression, high anxiety, and obsession, on the other hand, may make it difficult to suppress, and efforts to do so may even eventuate in rebound.

Experimental Questions

Numerous experimental studies have been performed, aiming to verify whether normals experience the rebound effect, a negative and ironic consequence of thought suppression (Cf. Wegner, 1994). An ancillary search for an initial enhancement effect during suppression (e.g., Lavy and van den Hout, 1990) has also been pursued, albeit less eagerly. Conflicting results suggest that perhaps neither memory phenomenon can be

reliably generalized to normals but one or the other may occur in specialized subpopulations (Cf. Rutledge et al., 1993). Nor can the results reliably be used to explain the etiology of or prescribe treatment for clinical populations (Cf. Merckelbach et al., 1991; Nolen-Hoeksema, 1993).

Among the experimental variables that differ from study to study and may thus have confounded outcomes are: criteria for successful suppression; environmental factors: manipulated time intervals and tasks; instructions: instrumentation; nature, length, and complexity of stimuli: nature of requested responses: interpretation of responses: methods and procedures; subject pool: experimental design.

The question arose as to what would happen if the Wegner et al. (1987, Experiment 1) study were replicated but the variables of length, complexity of thought, and interest level were systematically manipulated by the selection of different types of stimulus materials. To provide the beginning of an answer to that question, two experiments were designed to increase the length of the stimulus but to use meaningful contexts to tie together chunks of information. Further, in making the selections, an attempt was made to bypass any tendency of normal subjects to project themselves significantly into the subject matter--at least no more than they might with the image of "white bear."

The original stimulus, "white bear," consisted of 2 words, was easily imagined, culturally distant, and personally irrelevant. The stimulus in the second experiment was a 334 word classic Amer-Indian tale, "War of the Ghosts" (see appendix A for the full text), which has found its way into the literature from time to time (Bartlett, 1932; Erdelyi, 1991; Wegner and Schneider, 1989). It may also be characterized as culturally

distant and not personally relevant but it taxes memory and imagination much more substantially than does "white bear." The stimulus of approximately the same length in the third experiment was a dry treatise from a dictionary about the origin and use of the term ISV, the International Scientific Vocabulary (see appendix B for the full text). In all probability, the dictionary selection can be described as less interesting and thus perhaps less memory captivating than the War of the Ghosts. It has no significant cultural content nor is it personally relevant. It requires, however, a different cognitive effort to understand and remember from that imposed by a strange story such as the War of the Ghosts, which has a beginning, middle and end.

It was hypothesized that the subspan memory target, "white bear," might follow the Wegner pattern but that the two more complex stimuli would follow Ebbinghaus because they were considerably longer and thus taxed memory more significantly. (Actually the first expectation was under a cloud in view of the bumpy replication history of the effect.)

Establishing the reliability of a rebound effect is important because of the implications it has for aspects of day- to-day living and the clinical management of mental health patients. Can suppression of thoughts lead to increased preoccupation with these very thoughts and, in turn, move on to obsession, depression, CNS stress, and the like? And is that a possibility for everybody or just for certain sub-populations, such as repressors or the clinically depressed? These are crucial queries.

The Original White Bear Experiment

At this point, a more detailed description of Wegner et al.'s (1987) influential study is presented, allowing for a better understanding of their degree of support for both

the difficulty to suppress and the rebound effect. By doing so, the rationale for the design of the following experiments should become clearer.

Four issues were probed in the original white bear experiment (Wegner et al., 1987):

1) How well, in general, are subjects able to suppress the thought of a "white bear" in a suppression period, whether that period precedes or follows a period of expression?

2) Does order of instruction, to suppress or express initially, make any difference in the exercise of the ability to suppress in a suppression period and (or) in the number of reported thoughts in an expression period?

3) How consistent are subjects from the first five minute time-block to the second in the reported numbers of thoughts each has about a white bear, irrespective of the instructions? That is, on the basis of individual differences, will a positive correlation be found between serial time-blocks across conditions?

4) Irrespective of order of instruction, is there an underlying and diminishing time-course of thought accessibility (as one might expect from the findings of Ebbinghaus [1885/1964])?

As regards the first question, Wegner et al. (1987) found that there was a significant difference between numbers of thought tokens in the suppression and expression periods, with the suppression periods having the fewer number. (Thought tokens were defined as bell rings alone, mentions alone, and bell rings and simultaneous mentions.) Thought suppression was judged, nevertheless, to be a difficult task: "...it is noteworthy that suppression is never complete. Participants indicated thinking about a

white bear...more than once per minute even when instructed not to think about a white bear (p.7)." Similar results were reported for their second experiment even when subjects were given a distractor to focus on whenever the thought of a white bear intruded.

In answer to the first part of the second question, Wegner et al. (1987) found that order of instruction had no effect on the ability of subjects to suppress. There was, however, a significantly greater number of total target thought-units (all bell rings alone, all mentions alone, and all simultaneous bell rings and mentions) signaling thoughts about a white bear, in the expression period following suppression (S_1-E_2) as compared with the expression period preceding it (E_1-S_2). This result was labeled the rebound effect (i.e., $E_2 > E_1$).

In a second experiment, which replicated the findings in the first experiment with respect to the ability to suppress and the rebound effect, Wegner et al. (1987) included another measure, thought duration--the number of seconds devoted to talking about a white bear--which also produced a marginal rebound effect ($p < .06$).

To answer the third question, concerning within-subject consistency in the number of reported thoughts about bears from the first to the second time-blocks, no relation was found in the first experiment (Wegner et al., 1987) between the number of subjects' thoughts about white bears in the suppress-the-thought and express-the-thought periods when the directive to suppress occurred first (S_1-E_2). There was, however, a significant correlation ($r = .55$) when the order of the time-blocks was reversed (i.e., in the E_1-S_2 condition). Evidently, they hypothesized, the rebound effect so markedly increased reported thoughts about white bears in the expression period following suppression (S_1-E_2) that the expected within-subject consistencies from period to period

never materialized in that particular order condition. The same correlation analysis applied in the second experiment produced similar results.

To answer the fourth question about minute-to-minute memory accessibility trends within subjects, a fourth methodology was used in the original study (Wegner et al., 1987) to confirm the rebound effect. When examining total bell-rings only (there is no explanation as to why mentions only and simultaneous bell rings and mentions were dropped from this particular analysis), bell rings per minute increased over the 5-minute period of expression when it followed the suppression period but not for any of the other three 5-minute time-intervals (i.e., not in the suppression period following expression, nor in the suppression period preceding expression, nor in the expression period preceding suppression), where they indeed decreased over time, as would be expected from progressive forgetting, and (or), as Wegner et al. (1987) explained it, from "disinterest and fatigue" (p.7).

Research Objectives

The purposes of this research were as follows:

1. To retest for both the purported difficulty with suppression and the subsequent rebound effect found by Wegner et al. (1987) using "white bear" as the stimulus.

Instead of using bell rings and oral speech, checkmarks and a written stream of consciousness format was adopted as per Wenzlaff et al. (1988) in their study of depression in relation to thought suppression, and also as employed by Wenzlaff et al. (1991) in their research on the role of thought suppression in the bonding of thought and mood. Checkmarks were included as in the Wenzlaff et al. (1991) study, "to catch any reportable thoughts that happened too quickly for written acknowledgment (p. 501)." It

should be noted that in the unpublished replication experiment performed by Schakelford, Wegner, and Schneider (1987) using bell rings alone, bell rings and verbalizations, and verbalizations alone, the replicating results of zero-order within-subject correlations between time intervals were cited to "cast doubt on the possibility that the bell-ringing requirement in the original study had any special influence on the occurrence of the rebound effect (Wegner et al., 1987, p. 8)." Furthermore, in the study of the role of thought suppression in the bonding of thought and mood, Wenzlaff et al. (1991) once again reconfirmed the rebound effect of the first experiment in the Wegner et al. (1987) study, using checkmarks and written thoughts as the response modes instead of bell rings and verbalizations. Thus, it is unlikely that these differences in methodology are significant.

The current experiment also aimed to replicate studies of shifts in responses over time (cf. Wegner et al. 1987; Wegner et al., 1991; Wegner et al., 1990). To that end subjects were asked to draw a horizontal line across the page at the end of each minute.

Wegner et al.'s (1987) original study had the following design. Instructions to suppress were followed by instructions to express for subjects in one condition (S₁-E₂) whereas instructions were given in the reverse order to subjects in the second condition (E₁-S₂). The rebound effect was thus observed when comparing the number of reported thoughts about a white bear in a second five-minute expression time block (minutes six through ten) to the number of reported thoughts about a white bear in a first five-minute expression time block (minutes one through five).

Because Wegner et al.'s (1987) original study had a mismatch in the actual time periods compared, this experiment included a third condition, expression for five minutes

followed by the instruction to continue expressing for another five minutes (E_1 - E_2). The expansion of the experimental design allowed for comparisons between expression periods that were both within the same absolute time- block (6th through 10th minutes) to control for time-related effects such as fatigue, boredom, and the like.

Two other studies (Wegner et al., 1991; Wenzlaff et al., 1991) also made comparisons between expression periods that were in parallel time-blocks as will be done in this study. In both of those studies, however, the comparisons are confounded by the addition of a second experimental manipulation--a showing, simultaneously, of a series of slides in the first experiment cited and the playing of mood music in the second. Hence the decision to include the third expression-expression (E_1 - E_2) condition free from additional experimental manipulations serves, in a sense, as a cleaner control for the possible effects of fatigue and boredom.

2. Two additional experiments were designed to test the boundaries of generalizability of Wegner et al.'s (1987, Experiment 1) findings, which, as underscored earlier, went against the Ebbinghaus grain:

A. A second experiment was designed to determine if a longer and more contextual stimulus would produce difficulties in suppression along with a rebound effect. A classic Amer-Indian story, The War of the Ghosts (see Appendix A) with a beginning, middle, and end, was selected. It was assumed that its content is as unrelated to subjects' lives as is the singular image of a white bear. Nevertheless, remembering or forgetting meaningful, interconnected wholes is closer to real life reminiscences and obli- vescences than amnesia or hypermnesia for a single image, lists of nonsense syllables, or a stack of unrelated pictures. It was expected that Ebbinghaus (1885) would prevail

because the stimulus was significantly longer and more complex than is the single simple image and two-word span of “white bear.”

B. A third experiment was designed to determine if the rebound effect could be obtained from an equally long and contextual stimulus of an entirely different nature but one that is still unrelated on a personal level to the subjects' lives. The selection was a dry passage which informs subjects about the criteria for the classification of dictionary words as members of the International Scientific Vocabulary. (See Appendix B for the full text.) But again, the aim was to stimulate holistically rather than with unrelated bits. Once again, Ebbinghaus (1885) was expected to win out for the same reasons.

General Method

Subjects

A statistically suitable number of undergraduates taking introductory psychology classes at Brooklyn College of the City University of New York signed up for the experiment to meet, in part, a course requirement for participation in such experiments. They convened with the experimenter in small groups, averaging four students per batch. The assignment of condition to batch was systematically shifted to encompass the entire school day.

Procedure

The subjects were briefed on the general purpose of the experiment and were asked for and had to give informed consent, in writing, in order to participate. All subjects read a set of instructions on how to report their thoughts as the experimenter read aloud to them the same instructions. (See Appendix C for briefing and general instructions) The instructions followed those set down by Pope (1978), with modifications to increase clarity, such as including additional examples of possible types of thought that might come to mind. It was made clear that, because the subjects could be assured anonymity, they could feel free to write absolutely anything that came to mind.

The subjects wrote for five minutes prior to any experimental manipulation. During that period (and subsequently during the experimental periods) they were asked to draw a horizontal line across the page at the end of each minute so that the experimenter would know "how far they had gotten" up to that point and they were urged not to let the process distract them from continuing to express their thoughts.

The practice period was instituted to insure more reliable results in the experimental periods. In that subjects denied such a prior practice period before they began the suppression task were reported to admit to significantly fewer target thought intrusions in the suppression time-block (Wegner et al., 1987). Wegner et al. (1987) theorized that the practice period familiarizes the subjects with the task of expressing their thoughts and thus allows them to feel more comfortable about admitting to difficulties during their attempts to suppress. Alternatively, they suggest that "perhaps the initial reporting helps people set aside their immediate concerns in the setting and get involved in the experimental task (p. 8)."

Experiment 1

The practice period was followed by the first experimental five-minute time-block which was preceded by the following instructions for the initial suppression group (S₁-E₂):

So, in the next five minutes, please continue to write your thoughts as you did before, with one exception. Try NOT to think about a white bear. Nevertheless, continue to write down every thought that comes to mind, whether or not it's about a white bear. If, despite your best efforts NOT to, you DO think about a white bear, even for an instant--when you're writing about something else--put a big checkmark on the paper at the moment you have the thought. Then just continue writing as before.

Remember, TRY not to think about a white bear but let us know about it if you do--even if you're writing about something else--by making those big checkmarks. [SHOW SAMPLE]

Ready? Begin.

Subsequently the participants were given instructions for the next five minutes wherein their task was to "try to think about a white bear." (See Appendix D for complete instructions.)

Subjects assigned to the initial expression group (E₁-S₂) were given essentially the same instructions but in the reverse order (see Appendixes E and F for complete instructions). Subjects in the expression-expression (E₁-E₂) group were asked after the first 5 minutes to continue to try to think about a white bear (see Appendixes G and H for complete instructions).

Results and Discussion

Analyses were completed for (a) checks only designating thoughts about a white bear, (see Figures 3-5), (b) mentions only about a white bear (see Figures 6-8), (c) Checks and mentions combined (see Figures 9-11), and (d) percent of mentions about a white bear (see Figure 11). (Figures 3-11 follow immediately in a block but will be referred to individually and in groups throughout this section.)

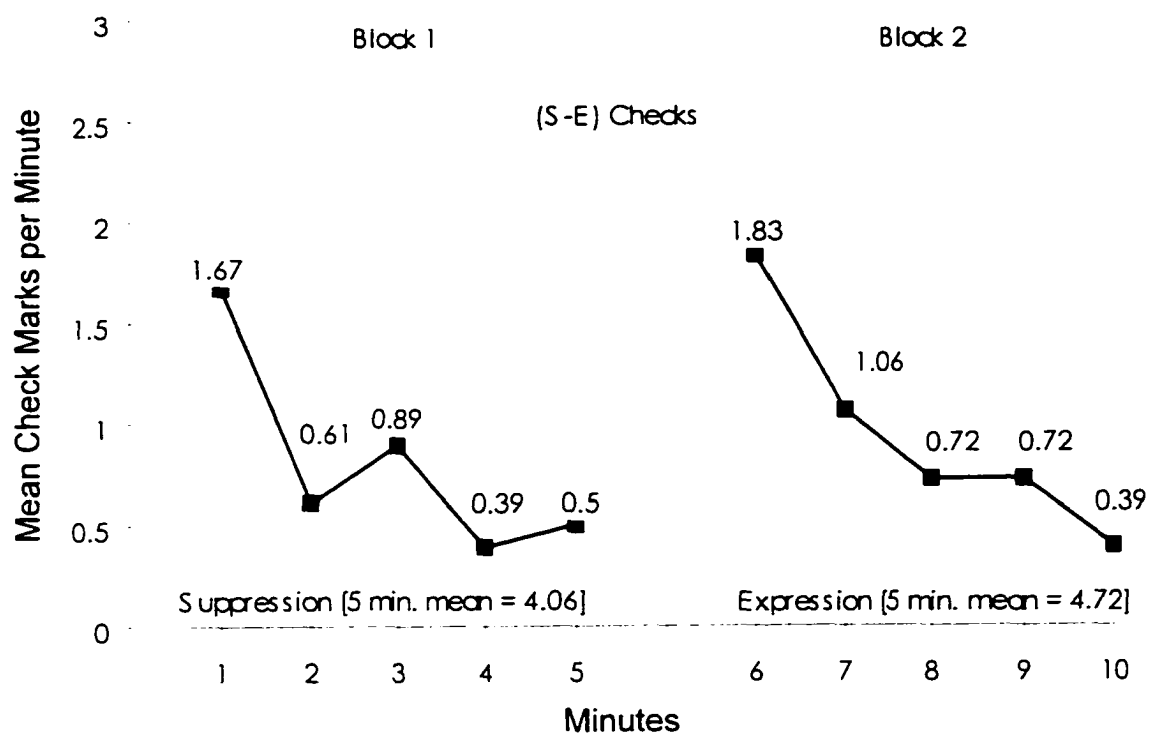


Figure 3. Checks per minute over two 5-minute periods for the suppression-expression condition (S_1-E_2) for white bear stimulus.

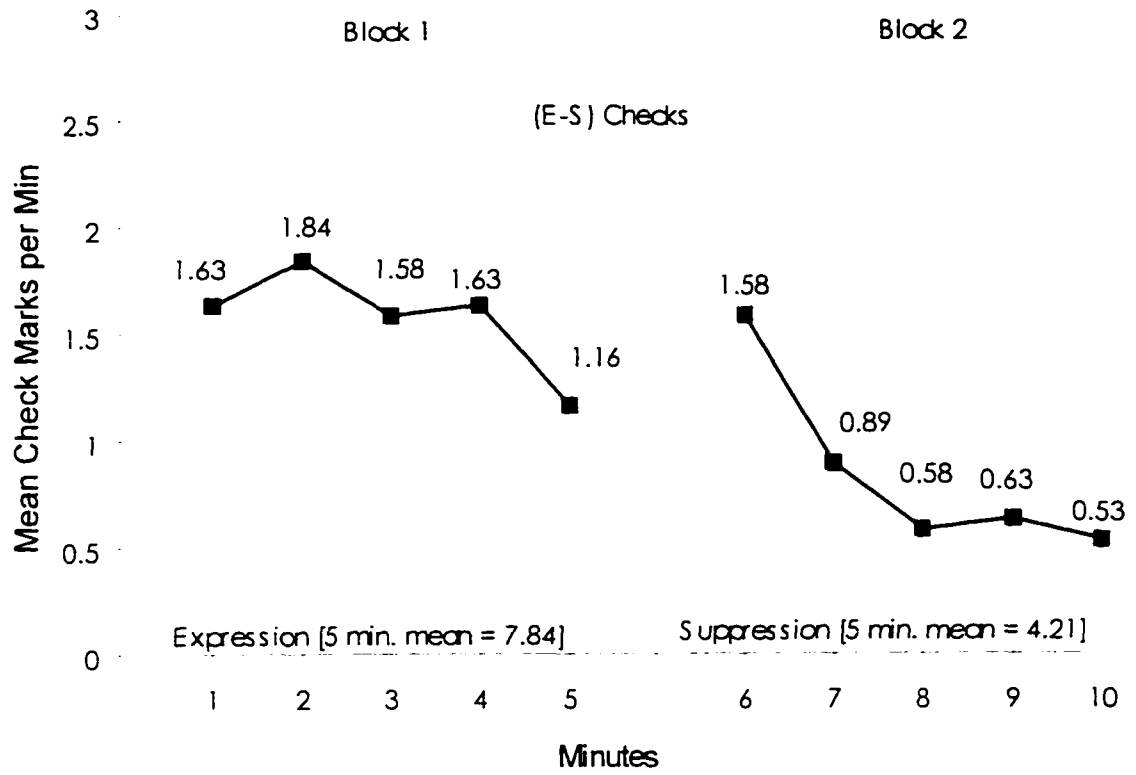


Figure 4. Checks per minute over two 5-minute periods for the expression-suppression condition (E_1-S_2) for white bear stimulus.

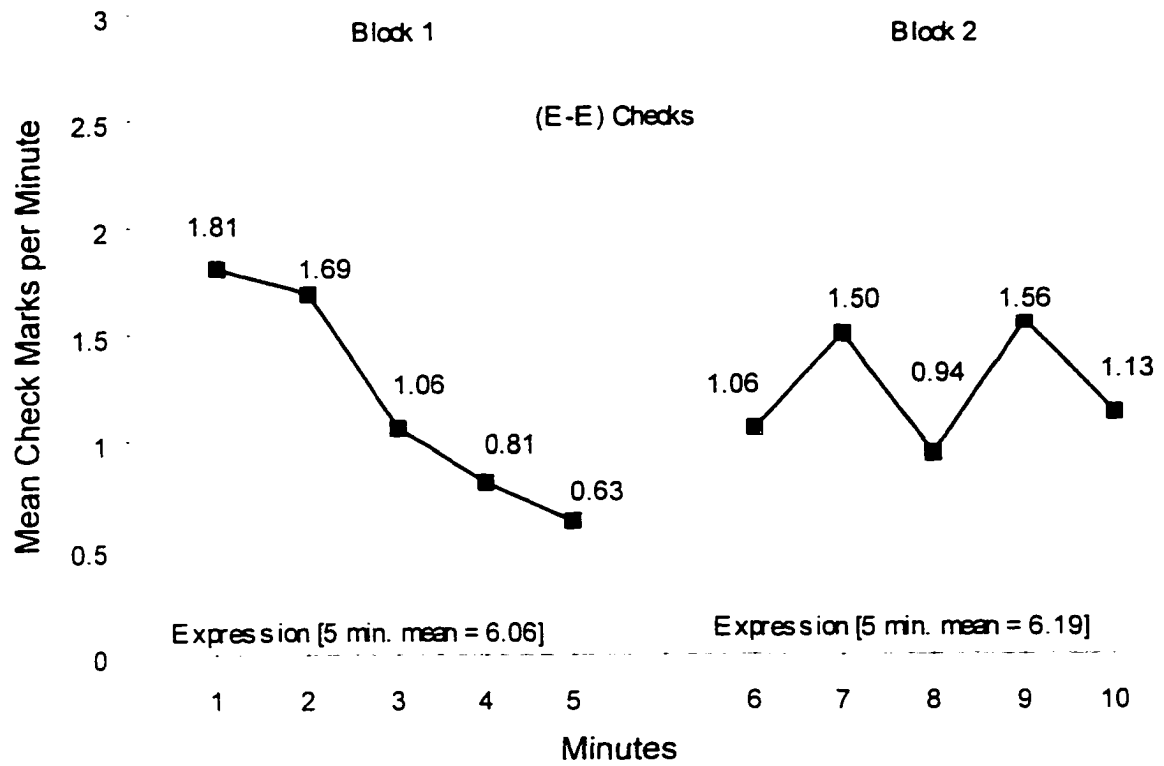


Figure 5. Checks per minute over two 5-minute periods for the expression-expression condition (E_1 - E_2) for white bear stimulus.

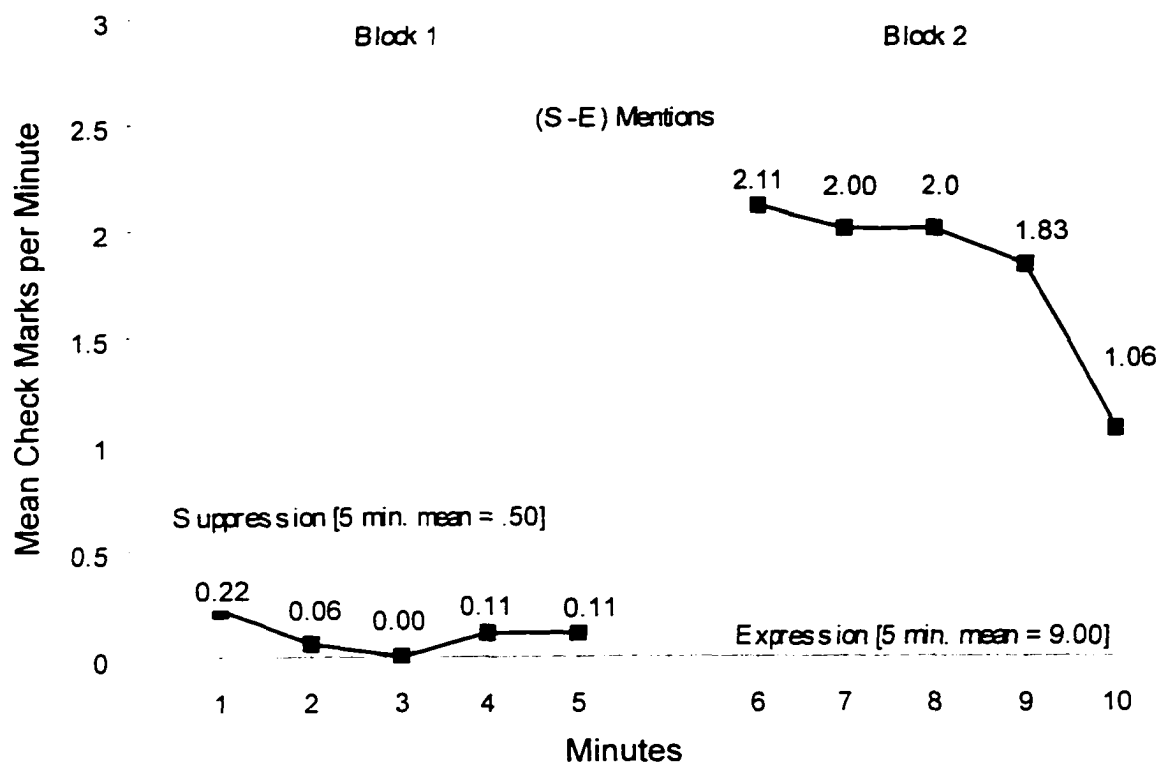


Figure 6. Mentions per minute over two 5-minute periods for the suppression-expression condition (S_1 - E_2) for white bear stimulus.

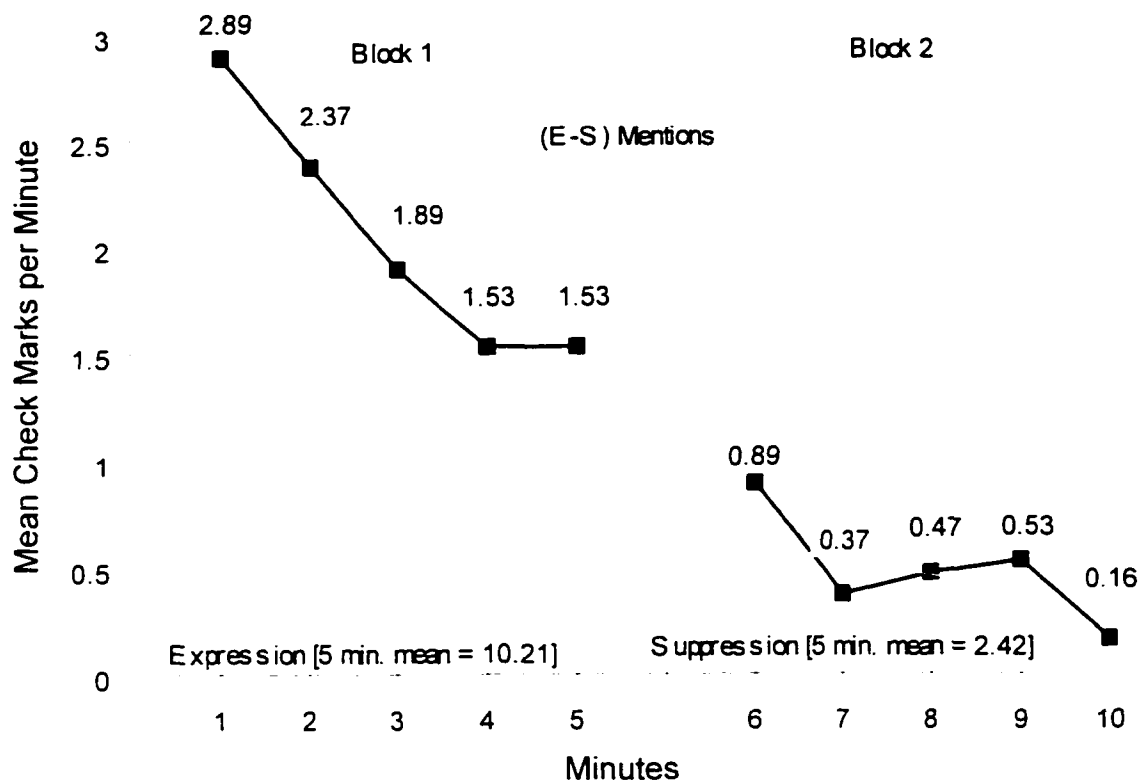


Figure 7. Mentions per minute over two 5-minute periods for the expression-suppression condition (E_1-S_2) for white bear stimulus.

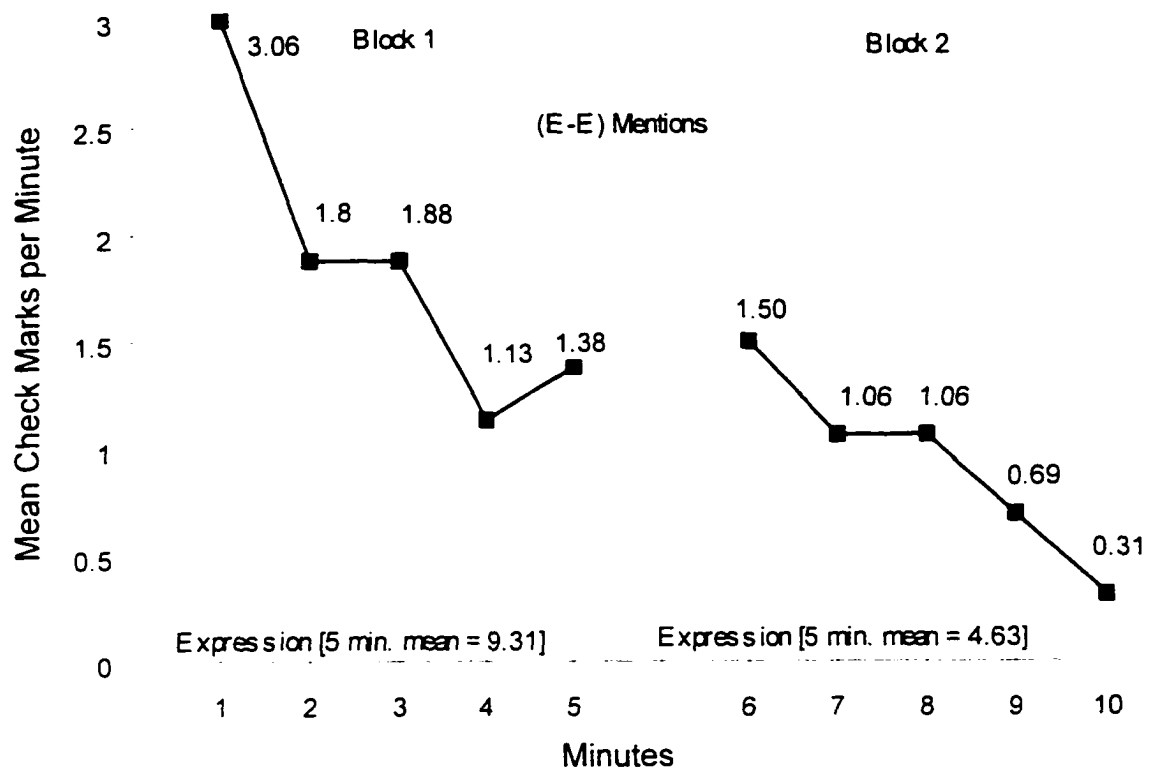


Figure 8. Mentions per minute over two 5-minute periods for the expression-expression condition (E_1 - E_2) for white bear stimulus.

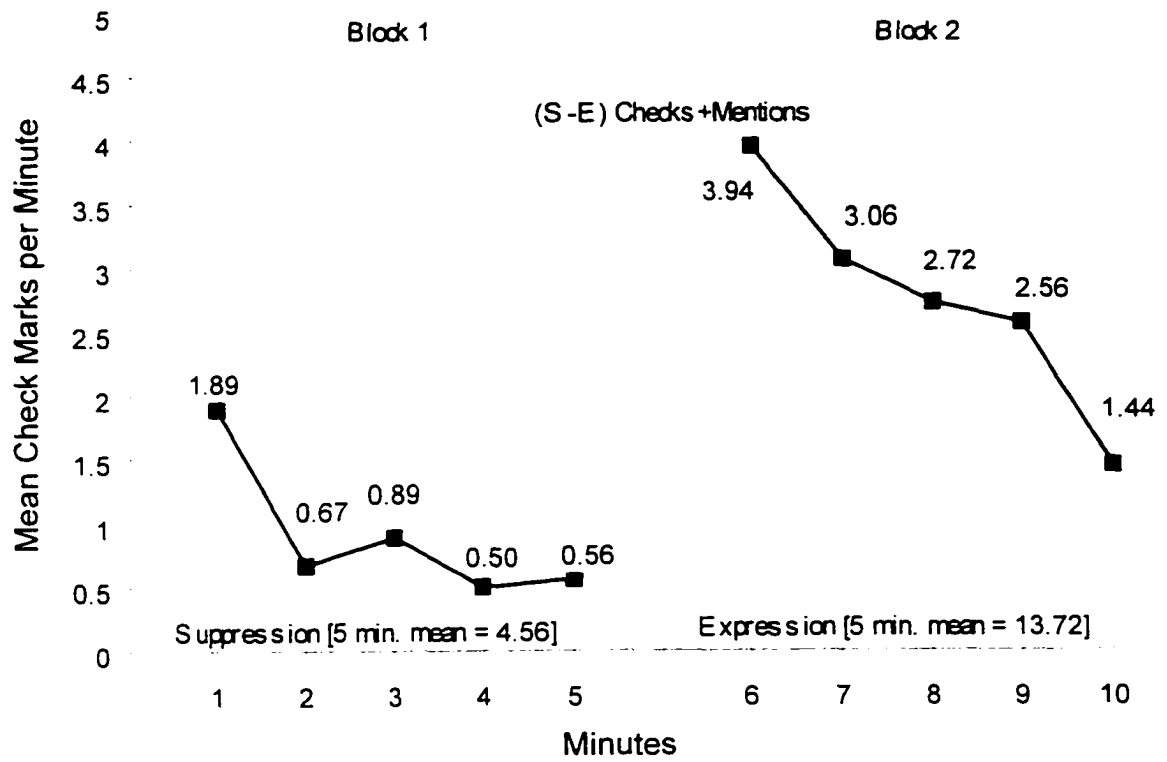


Figure 9. Checks and mentions combined per minute over two 5-minute periods for the suppression-expression condition (S_1-E_2) for white bear stimulus.

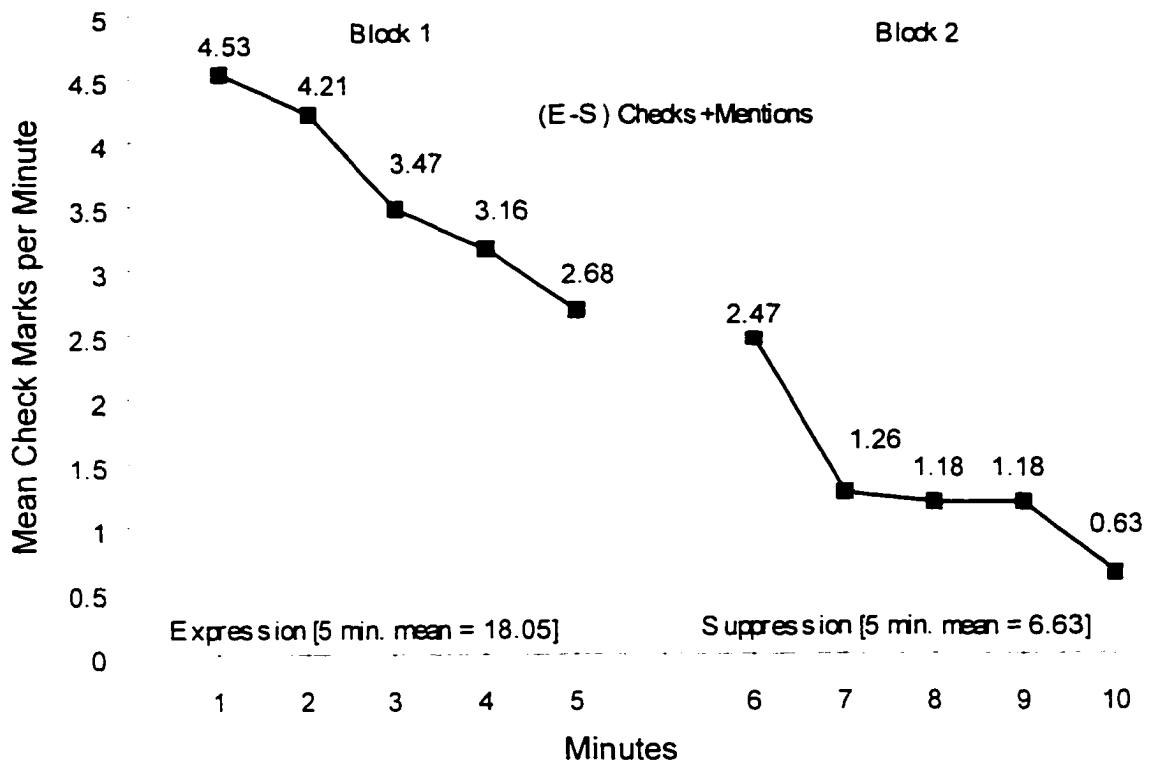


Figure 10. Checks and mentions combined per minute over two 5-minute periods for the expression-suppression condition (E_1-S_2) for white bear stimulus.

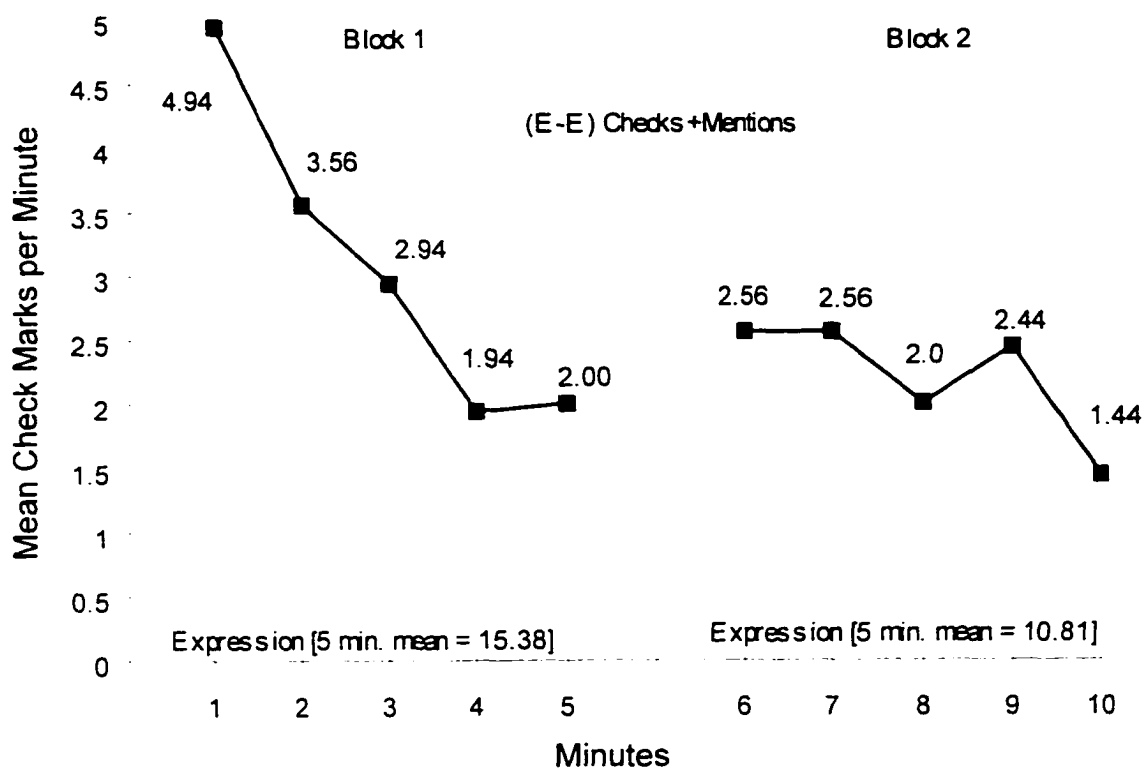


Figure 11. Checks and mentions combined per minute over two 5-minute periods for the expression-expression condition (E_1 - E_2) for white bear stimulus.

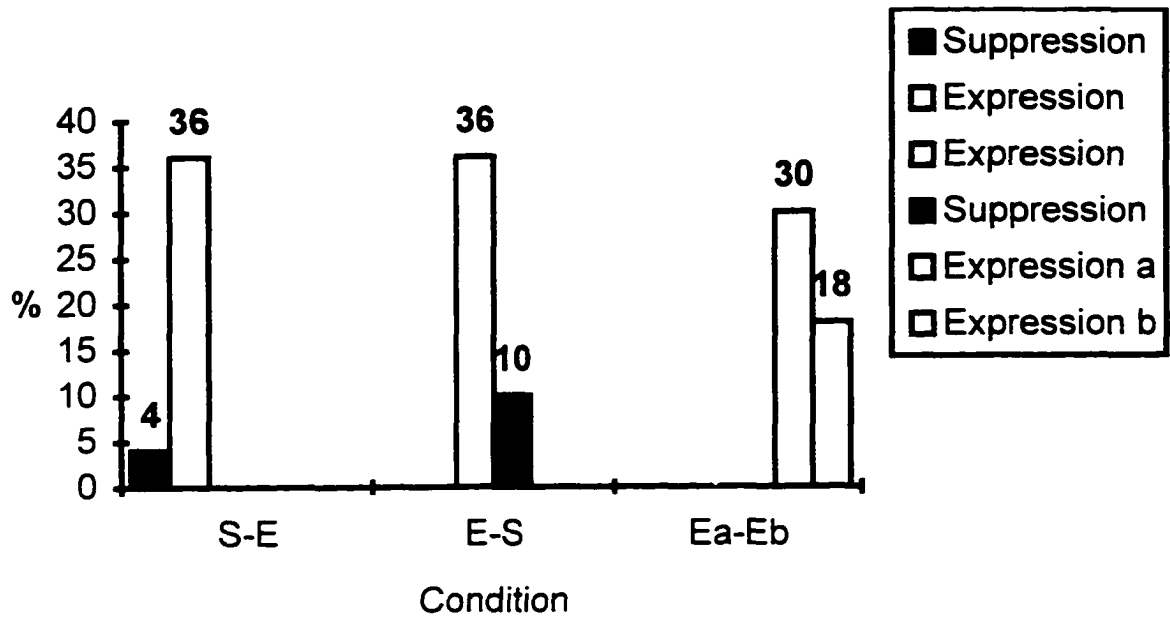


Figure 12. Percent of mentions for the White Bear stimulus.

Following Wegner et al. (1991), criteria were established for what constituted a mention (see Appendix M). Judges blind to experimental condition counted the number of times subjects mentioned a white bear or something related to it. The correlation between a pair of evaluators within each time block averaged .95 with a range of .94 to .96. Table 1 shows the means for each measure by condition.

Table 1

Measure of Thought by Group and Time-block for Experiment 1 (Stimulus: White Bear)

Group	Time-block		
	Sup.	Exp.	Exp. B
Initial suppression ¹			
(S ₁ -E ₂)			
checks only	S ₁ = 4.06	E ₂ = 4.72	
mentions only	S ₁ = .50	E ₂ = 9.00	
checks and men- tions combined	S ₁ = 4.56	E ₂ = 13.72	
Initial expression ²			
(E ₁ -S ₂)			
checks only	S ₂ = 4.21	E ₁ = 7.84	
mentions only	S ₂ = 2.42	E ₁ = 10.21	
checks and men- tions combined	S ₂ = 6.63	E ₁ = 18.05	
Expression expression ³			
(E ₁ - E ₂)			
checks only		E ₁ = 6.06	E ₂ = 6.19
mentions only		E ₁ = 9.31	E ₂ = 4.63
checks and men- tions combined		E ₁ = 15.38	E ₂ = 10.81
1. N = 18	2. N = 19	3. N = 16	

Let us review what the thrust of this experiment was. Initially, however, it is important to remember that Ebbinghaus (1885) was the first experimental psychologist to direct his subject (i.e., himself) not to think about perfectly memorized lists of nonsense syllables between spaced attempts to recall them. Thus the body of his work in this domain can be viewed as the forerunner of all subsequent research on the suppression of thought. What Ebbinghaus (1885) found, of course, was a steady memory decrement over time. Since Wegner et al.'s (1987) rebound results went counter to what one would expect given Ebbinghaus' (1885) findings--that is, they found an increment in memory over time after an initial period of suppression--the primary goal of this experiment was to replicate Wegner et al.'s (1987) study and determine, among other things, if, indeed, the rebound effect would be revealed. The replication was a precursor to executing two additional experiments designed to manipulate the effects of length and interest-level of stimuli wherein subjects would also be asked to suppress from their thoughts. The expectation was that the white bear experiment might replicate but that the other experiments might not for the reasons outlined.

The results of this experiment do not confirm Wegner et al.'s (1987) findings but do support Ebbinghaus' (1885). What can account for the non-replication found in this experiment? Before an attempt is made to answer the query generally, specific results will be reviewed to explain how and why the findings in this study differ importantly from those of Wegner and his colleagues (1987).

Rebound analysis. The most notable results to review are those which speak to the matter of the rebound effect. In experimental terms the question is whether there are

differences in numbers of thought tokens within expression periods depending upon which order comes first, to express or suppress. Only one significant result was found. Checks alone was the only measure among the four types of thought tokens analyzed which was significantly different between the two experimental groups as a function of order of instruction. And this single significant difference went counter to Wegner et al. (1987). In this study, checks alone were measured to occur significantly more often in the expression (E) period of the initial expression group (E_1-S_2 , mean=7.84) than in the expression (E) period of the initial suppression group (S_1-E_2 , mean=4.72, $MSE=1.41$, $F(1,35)=5.80$, $p<.05$). Thus, not only did the rebound effect not materialize herein, but the one significant finding indicated that there were more thoughts (as represented by checkmarks) about a white bear in the group of subjects which had a chance to express first--which is what you might expect from a commonsense point of view with respect to memory. The fresher the stimulus, the more likely it is to be recalled.

The above statistics are taken from a 2 (condition) x 2 (instruction) x 2 (thought measure) analysis of variance (ANOVA) which was conducted on square root transformed scores. (The square root transformation was used in this study as in Wegner et al.'s (1987) original study in order to achieve homogeneity of error variances [Kirk, 1968]. For clarity the reported means are not transformed.)

Remember, further, that Wegner et al.'s (1987) study compared the number of thought tokens in the expression periods of the two experimental groups (S_1-E_2 and E_1-S_2), wherein they found the rebound effect: a significantly greater number of thoughts about a white bear in the expression (E) period following suppression (S_1-E_2) than preceding it (E_1-S_2). One problem with their design, however, is that they compared a

second five-minute time-block with a first five-minute time-block, which comparison did not control for the possible effects of forgetting, fatigue, boredom, and (or) participatory burnout that may occur as subjects proceed from time-block to time-block.

To correct for this omission this study included a third group, a control group (E_1-E_2), wherein subjects were instructed to continue expressing their thoughts about a white bear during a second five-minute time-block after having expressed their thoughts on the same subject for an initial five minutes. T-tests for independent samples were completed to compare the findings in the expression (E) periods of the two experimental groups (groups S_1-E_2 and E_1-S_2) with the expression (E) periods in the control group (E_1-E_2) but produced no significant differences. With respect to the two initial expression (E_1) time-blocks for the initial expression group (E_1-S_2) and the control group (E_1-E_2), the finding provides a reliability check for the number of reported thoughts counted in the expression period of the experimental initial expression condition (E_1-S_2).

In sum, whether one uses the data in this study to make comparisons as Wegner et al. (1987) did with mismatched time-blocks, or whether they are used to compare time-blocks that are exactly matched, minute for minute, the rebound effect does not materialize.

It may also be recalled that Wegner et al. (1987) explored another avenue to buttress further their findings and rationale for the rebound effect. They measured consistency within subjects from task to task and expected to achieve results consonant with the theory that such consistency should obtain "on the basis of a straightforward individual differences interpretation (p. 7)." Such an assumption is open to question, however, considering the nature of their experiment. It would seem that the very essence

of their study lies in the specific instructions they administered, to suppress or express thoughts. Those instructions are geared to obviate any tendency of subjects to perform consistently from time-block 1 to time-block 2. The better participants are in following the instructions (and individual differences may account, ironically, for their skill or lack of same in doing so), the less likely is one to find a correlation.

Nevertheless, Wegner et al. (1987) used their finding that there were significant correlations in all time blocks but one, the expression (E) period of the initial suppression (S_1-E_2) condition, as additional support for the rebound effect. Subjects were so affected by having to suppress information initially, they argued, that an outpour of thoughts about a white bear could not be stemmed come expression time.

In this study, correlations were calculated using square root transformations. None of the thought measures for any of the groups was significant except for checks only in both the initial expression group (E_1-S_2 : $r(19)=.54$, $p<.05$) and the control group (E_1-E_2 : $r(16)=.54$, $p<.05$). Although the initial suppression group (S_1-E_2) did not produce a significant correlation from block 1 to block 2 for checkmarks, the trend was in the same direction ($r(18)=.41$, $p=.09$). Thus these results can hardly be used to buttress the weak infrastructure of a rebound effect for normal subjects.

Time-line analysis. The second most significant matter to explore relates to the nature of the time-line uncovered within each five-minute block. It will be recalled that Wegner et al. (1987) found, consistently, decrements over time for all time-blocks in all conditions but one: the second time-block of the initial suppression condition (S_1-E_2), wherein thoughts about white bears increased progressively, thereby producing the rebound effect. With the exception of this latter finding, their research was in line, as

indicated earlier, with the results of most of the reported research examining this phenomenon. Subjects tend to forget over time.

What, one may ask, was the minute to minute variation within subjects within time-blocks in this experiment and was the pattern and (or) the direction of that variation (if any) important in drawing conclusions about the rebound effect?

Three 2 (condition) x 2 (instruction) x 5 (1-minute segments) ANOVAs on square root transformed thought measures were performed. A main effect for minutes was significant for all three thought measures: checks alone; $MSE=.32$, $F(4,140)=6.22$, $p<.001$ (see Figures 3.4); mentions alone, $MSE=.28$, $F(4,140)=6.23$, $p<.001$ (see Figures 6.7); checks and mentions combined, $MSE=.39$, $F(4,140)=9.48$, $p<.001$ (see Figures 9.10), indicating that, over a five-minute block of time, significant changes occurred in subjects' response rates.

A separate 2 (instruction) x 5 (minutes) ANOVA on transformed thought measures was performed for the control group (E_1 - E_2), which received two set of instructions to express. There was a significant main effect for minutes for all thought measures indicating, once again, that significant changes occurred in subject response rates over time: checks alone, $MSE=.29$, $F(4,60)=3.16$, $p<.05$ (see Figure 5); mentions alone, $MSE=.52$, $F(4,60)=3.81$, $p<.01$ (see Figure 8); checks and mentions combined, $MSE=.41$, $F(4,60)=5.88$, $p<.001$ (see Figure 11). There was only one significant two-way interaction of instruction by time segments for any thought measure, that for checks alone, $MSE=.27$, $F(4,60)=2.65$, $p<.05$, indicating that, in the first period of expression (E_1), there was a significant decrease over time, whereas during the second period of

expression the check responses were essentially flat (with some ups and downs) (see Figure 5).

A trend analysis resulted in the finding that, for the initial suppression group (S_1-E_2), checks alone decreased significantly over time, $MSE=.32$, $F(1,17)=6.65$, $p<.05$ (see Figure 3), in the suppression period (first five minutes), whereas mentions alone decreased significantly over time in the expression period (second five minutes), $MSE=.48$, $F(1,17)=9.24$, $p<.01$ (see Figure 6). When checks and mentions were combined, there was a significant decrease over time for both periods: block 1: $MSE=.34$, $F(1,17)=6.59$, $p<.05$; Block 2: $MSE=1.68$, $F(1,17)=5.71$, $p<.05$ (see Figure 9).

For the initial expression group (E_1-S_2) there was a significant decrease over time for all thought measures in both five-minute periods except for the second five-minute period for mentions alone: checks alone, Block 1: $MSE=.26$, $F(1,18)=4.71$, $p<.05$; checks alone, Block 2: $MSE=.37$, $F(1,18)=7.57$, $p<.05$ (see Figure 4); mentions alone, Block 1: $MSE=.29$, $F(1,18)=13.10$, $p<.01$ (see Figure 7); checks and mentions combined, Block 1: $MSE=.66$, $F(1,18)=14.21$, $p<.01$; checks and mentions combined, Block 2: $MSE=.77$, $F(1,18)=8.53$, $p<.01$ (see Figure 10).

In the control group (E_1-E_2), there was a significant decrease for all thought measures except for the second five-minute period for checks alone: checks alone, Block 1: $MSE=.33$, $F(1,15)=16.73$, $p<.001$ (see Figure 5); mentions alone, Block 1: $MSE=.63$, $F(1,15)=4.45$, $p=.05$; Block 2: $MSE=.34$, $F(1,15)=11.29$, $p<.01$ (see Figure 8); checks and mentions combined, Block 1: $MSE=1.20$, $F(1,15)=13.47$, $p<.01$; Block 2: $MSE=.62$, $F(1,15)=7.08$, $p<.05$ (see Figure 11).

Thus, on the whole, within almost all of the time periods, subjects thought less and less about white bears over time, whether they were instructed to think about them or not to think about them. Furthermore, no finding in the minute by minute analyses supports the rebound effect.

Suppression analysis. Finally, one may wonder if the results of this study confirm the concept that subjects are capable of significant suppression. All data from this study relating to this question confirm what Wegner et al. (1987) found, which is that, although 100% thought suppression may be difficult to achieve for many subjects, most subjects are able to follow the directive to suppress. A main effect for instruction (checks and mentions combined) indicated that the expression (E) period (mean=7.95) elicited significantly more total responses than the suppression (S) period (mean=2.87), $MSE=1.84$, $F(1,35)=37.65$, $p<.001$

Turning to simple comparisons, for checks alone, the overall mean for both conditions for the expression time-blocks of 6.28 was significantly greater than that for the suppression time-blocks which had a mean of 4.14, $MSE=.77$, $F(1,35)=6.09$, $p<.05$. For mentions alone as well, the overall mean in the expression periods of 9.61 was significantly greater than the suppression time-blocks mean of 1.46, $MSE=1.69$, $F(1,35)=41.79$, $p<.001$. For checks and mentions combined the overall means were also significantly different in the same direction, with the expression groups having a mean of 15.89 and the suppression groups a mean of 5.60, $MSE=1.48$, $F(1,35)=37.65$, $p<.001$.

Thus for both types of thought measures counting numbers of reported thoughts about a white bear--checks alone and mentions alone (and also checks and mentions combined)--the means of the summed thought measures across both experimental

conditions, initial suppression (S_1-E_2) and initial expression (E_1-S_2), indicated significantly more reported thoughts during the expression periods than during the suppression periods.

Looking at simple comparisons in the ANOVA between suppression (S) and expression (E) time-blocks for each of the thought measures individually in each of the groups, the initial suppression group (S_1-E_2) and the initial expression group (E_1-S_2), all comparisons were significant but one, checks alone in the initial suppression group (S_1-E_2). The mean of 4.72 for checks alone in the expression (E) period was not significantly different from the mean of 4.06 in the suppression (S) period, $F < 1$. There were significantly more responses for mentions alone during the expression (E) period than the suppression (S) period (9.00 vs. 5.0), $MSE = 2.34$, $F(1,36) = 20.03$, $p < .001$; the same was true for checks and mentions combined (13.72 vs. 4.56), $MSE = 2.25$, $F(1,36) = 11.82$, $p < .001$.

For the initial expression group (E_1-S_2) there were significantly more responses for checks alone during the expression (E) period than the suppression (S) period (7.84 vs. 4.21), $MSE = .75$, $F(1,36) = 9.23$, $p < .01$. For mentions alone, the same was true (10.21 vs. 2.42), $MSE = 2.94$, $F(1,36) = 8.53$, $p < .01$, as it was for checks and mentions combined (18.05 vs. 6.63), $MSE = 2.18$, $F(1,36) = 13.41$, $p < .001$.

A separate 2 (condition) X 2 (instruction) ANOVA for percent of mentions showed that there was only a significant main effect for instruction, (36% vs. 7%) $MSE = .07$, $F(1,35) = 21.19$, $p < .001$ (see Figure 12), indicating that there were significantly more responses in the expression (E) period than in the suppression (S) period.

Clearly, most subjects were able to follow the instruction to suppress. Just as clearly, the opposite of an initial enhancement effect was obtained (Cf. Lavy and Van den Hout, 1990). The directive to suppress, whether issued prior or subsequent to the instruction to express, elicited fewer not more thought tokens from subjects.

There were, however, interesting differences among subjects. For checks alone, 16% of the participants were able to suppress thoughts of a white bear completely in the suppression period. For mentions alone that figure rose to 68%. Thus even though the group means support the notion that subjects thought about a white bear on the average of once per minute in the suppression time-blocks with a mean of 4.56 in the initial suppression group (S_1 - E_2) for checks and mentions combined and a mean of 6.63 for checks and mentions combined in the initial expression group (E_1 - S_2), there were a number of subjects who appeared to be capable of total suppression. Furthermore, as has already been documented, stating an average number of thoughts per minute over a five-minute time block is misleading, since the bulk of the thoughts in the suppression (and expression) periods occurred in the first few minutes of most of the time-blocks.

Conclusions. In summation one may conclude that, with respect to the stimulus "white bear," a) no rebound effect was uncovered, b) the trend within almost every five-minute block of time was downward c) subjects are certainly capable of thought suppression, and d) no evidence of an initial enhancement effect was measured.

Experiment 2

Essentially the same procedures, instructions, and statistics were used for the longer stimulus, the story of the War of the Ghosts (WOG), as was used for the "white bear" stimulus in Experiment 1. Appendix I details the "Read and Listen Instructions" for this stimulus, which instructions were proffered prior to the order manipulation components of the experiments (see Appendixes J-L for the exact wording of the "think about" and "don't think about" modules.)

Results and Discussion

Analyses were completed for (a) checks only designating thoughts about WOG (see Figures 13-15), (b) mentions only about WOG (see Figures 16-18), (c) checks and mentions combined for WOG (see Figures 19-21), and (d) percent of mentions about WOG (see Figure 22) (Figures 13 through 22 follow immediately in a block but will be referred to individually and in groups throughout this section.).

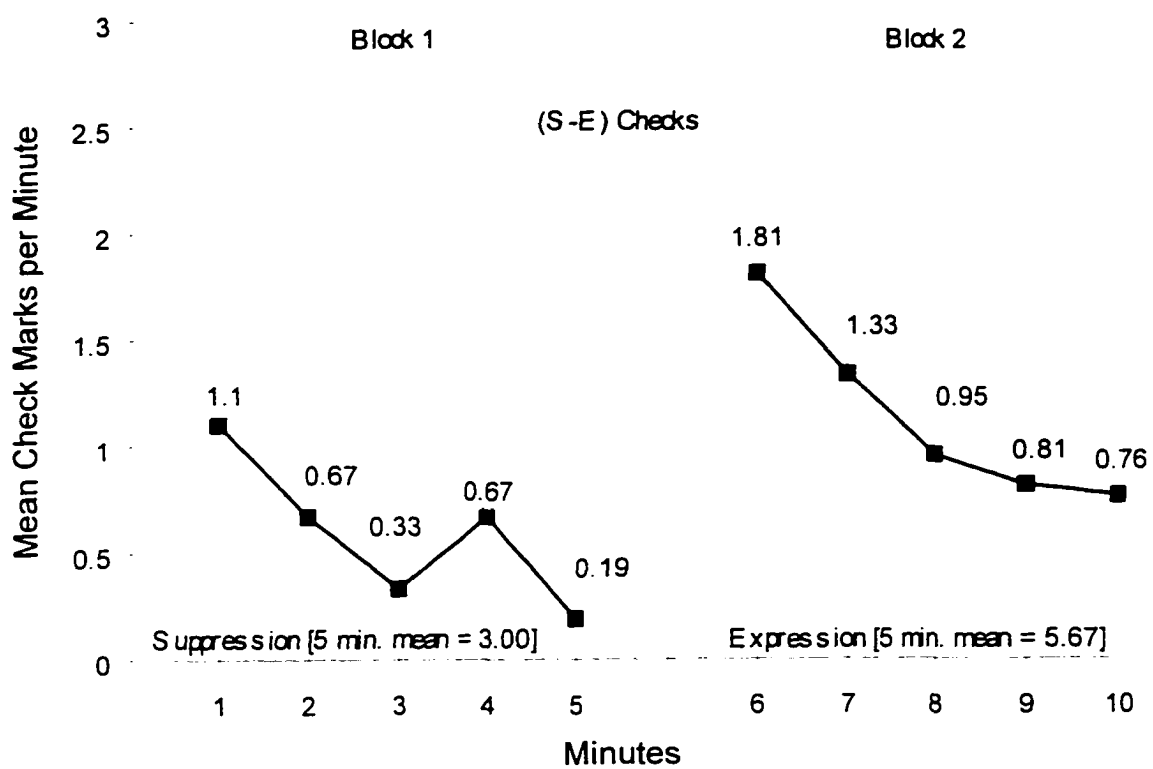


Figure 13. Checks per minute over two 5-minute periods for the suppression-expression condition (S_1-E_2) for the War of the Ghosts stimulus.

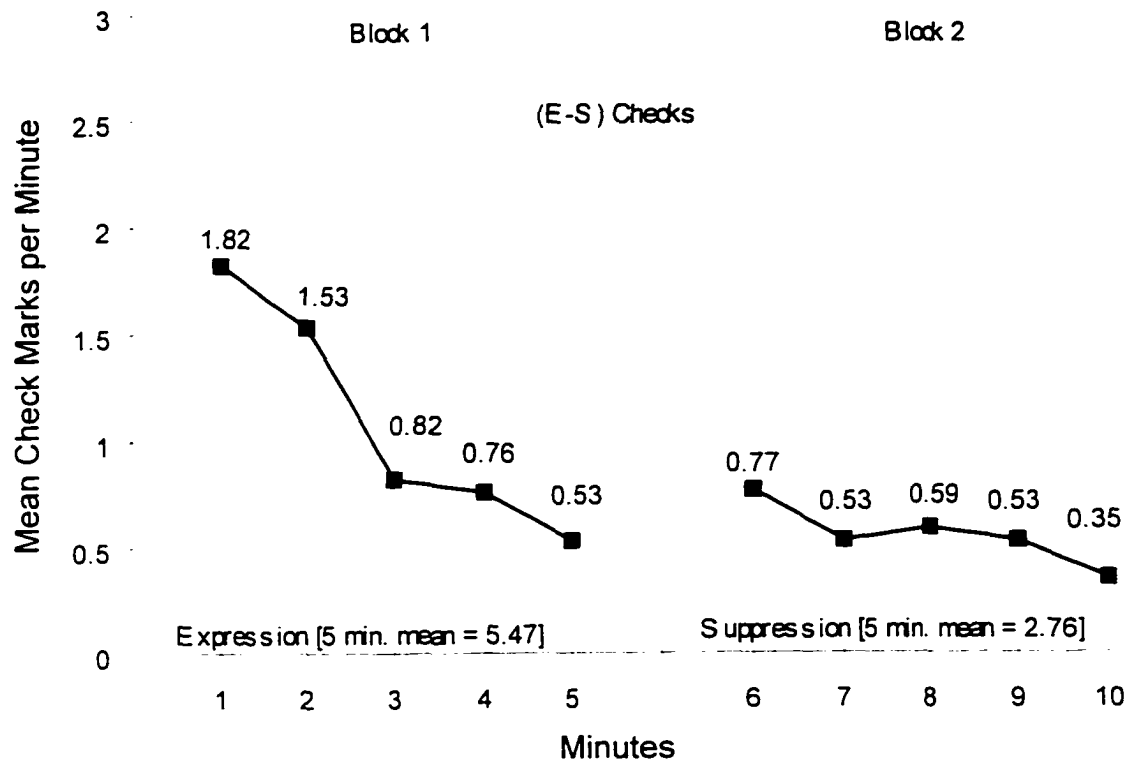


Figure 14. Checks per minute over two 5-minute periods for the expression-suppression condition (E_1-S_2) for the War of the Ghosts stimulus.

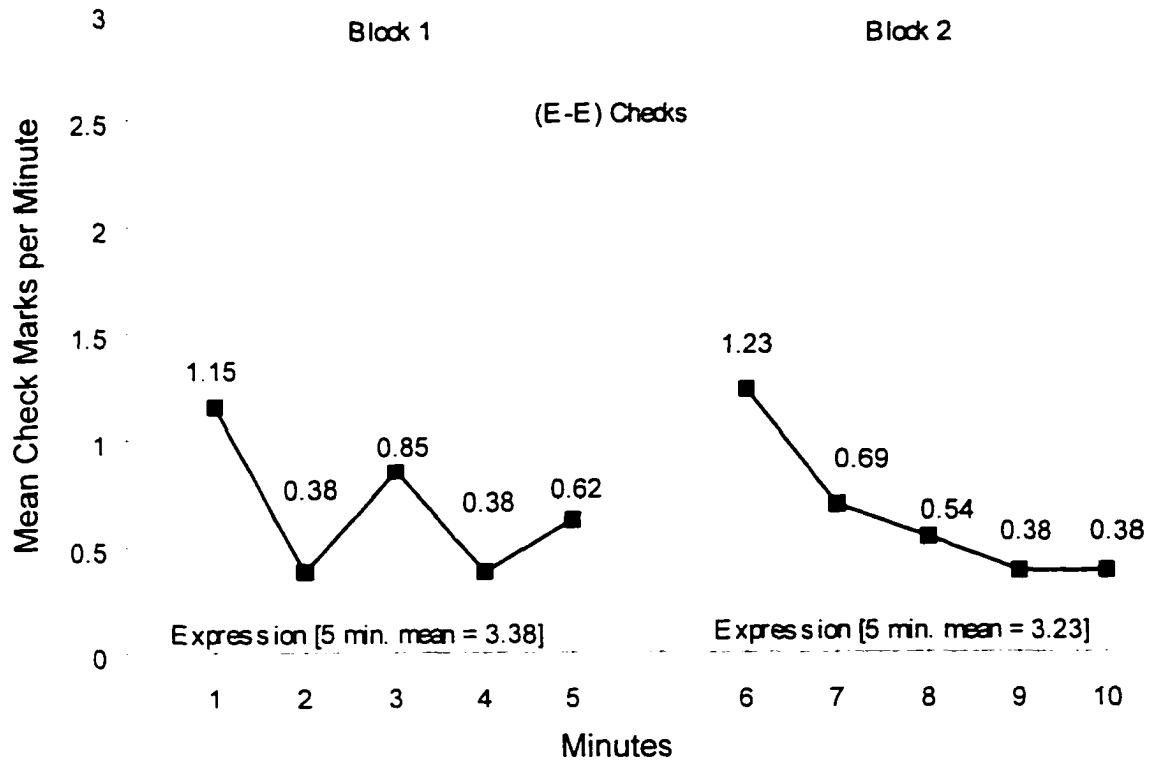


Figure 15. Checks per minute over two 5-minute periods for the expression-expression condition (E_1 - E_2) for the War of the Ghosts stimulus.

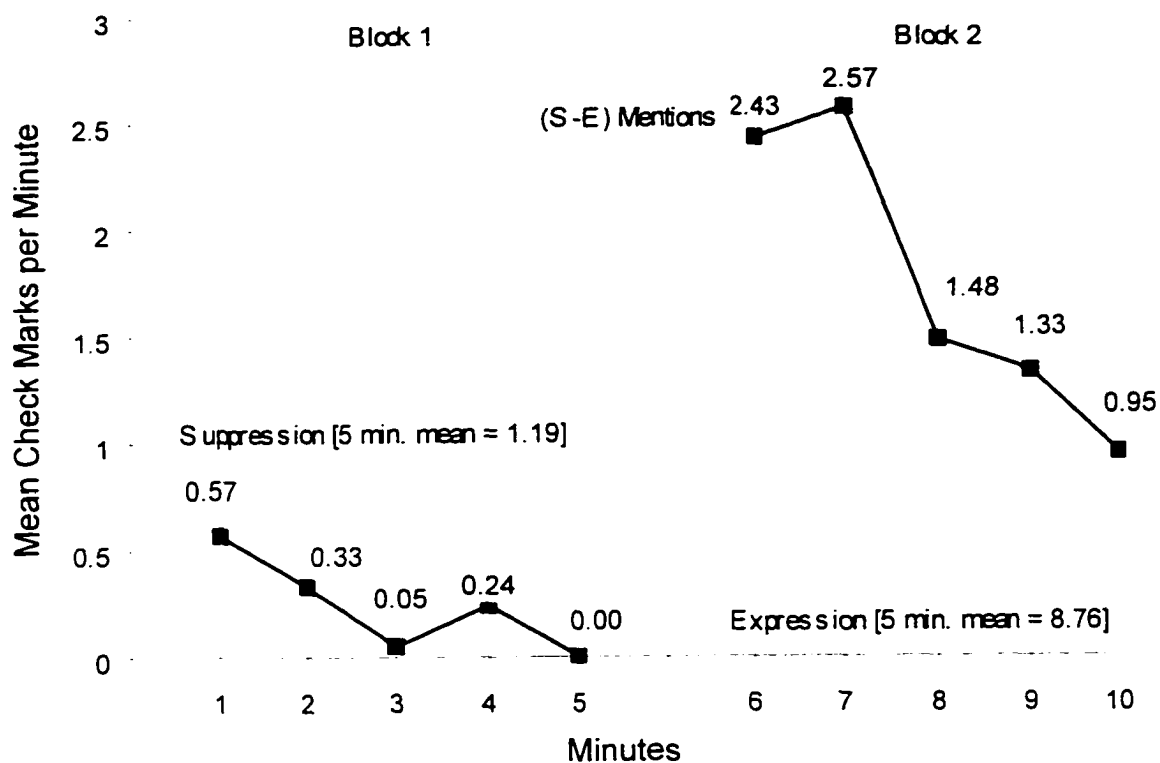


Figure 16. Mentions per minute over two 5-minute periods for the suppression-expression condition (S_1-E_2) for the War of the Ghosts stimulus.

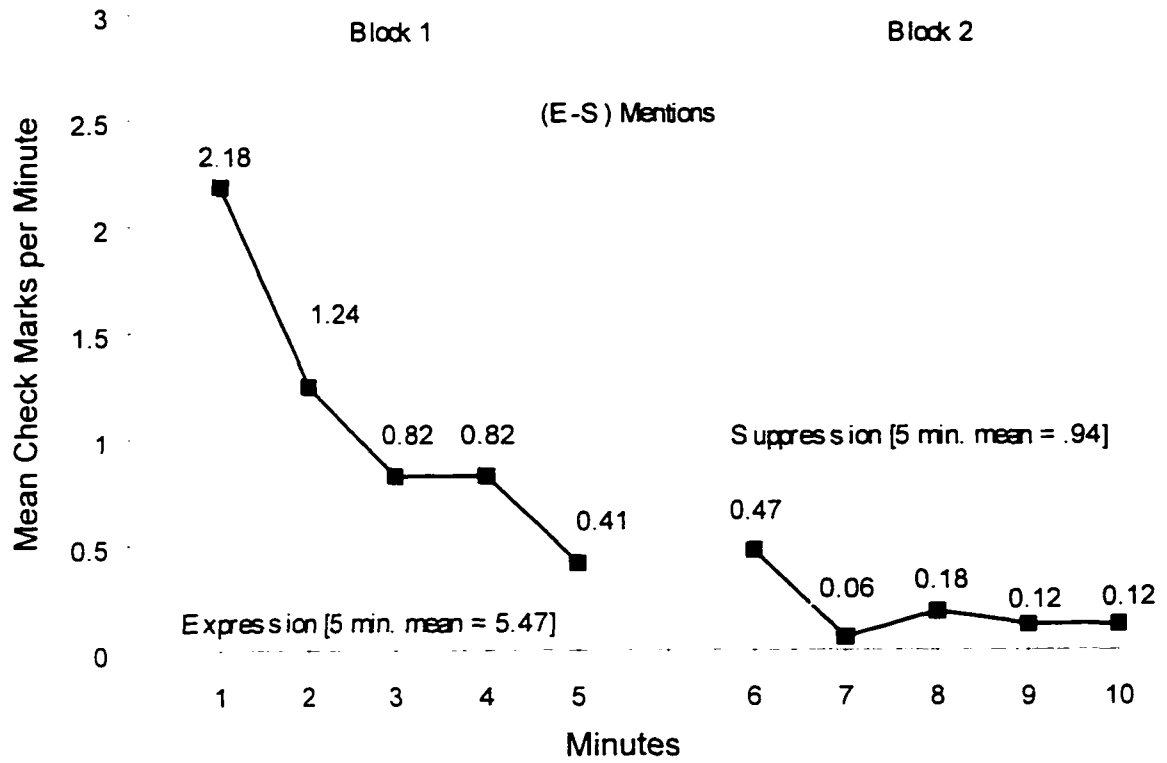


Figure 17. Mentions per minute over two 5-minute periods for the expression-suppression condition (E_1-S_2) for the War of the Ghosts stimulus.

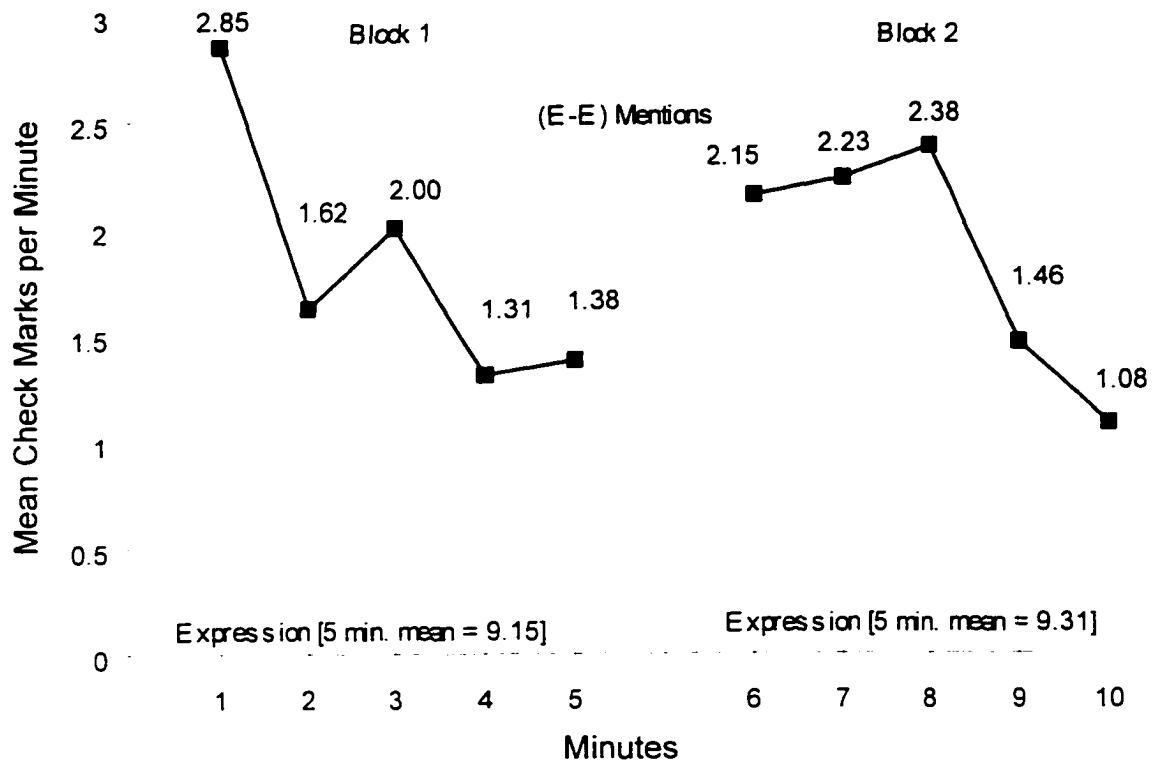


Figure 18. Mentions per minute over two 5-minute periods for the expression-expression condition (E_1 - E_2) for the War of the Ghosts stimulus.

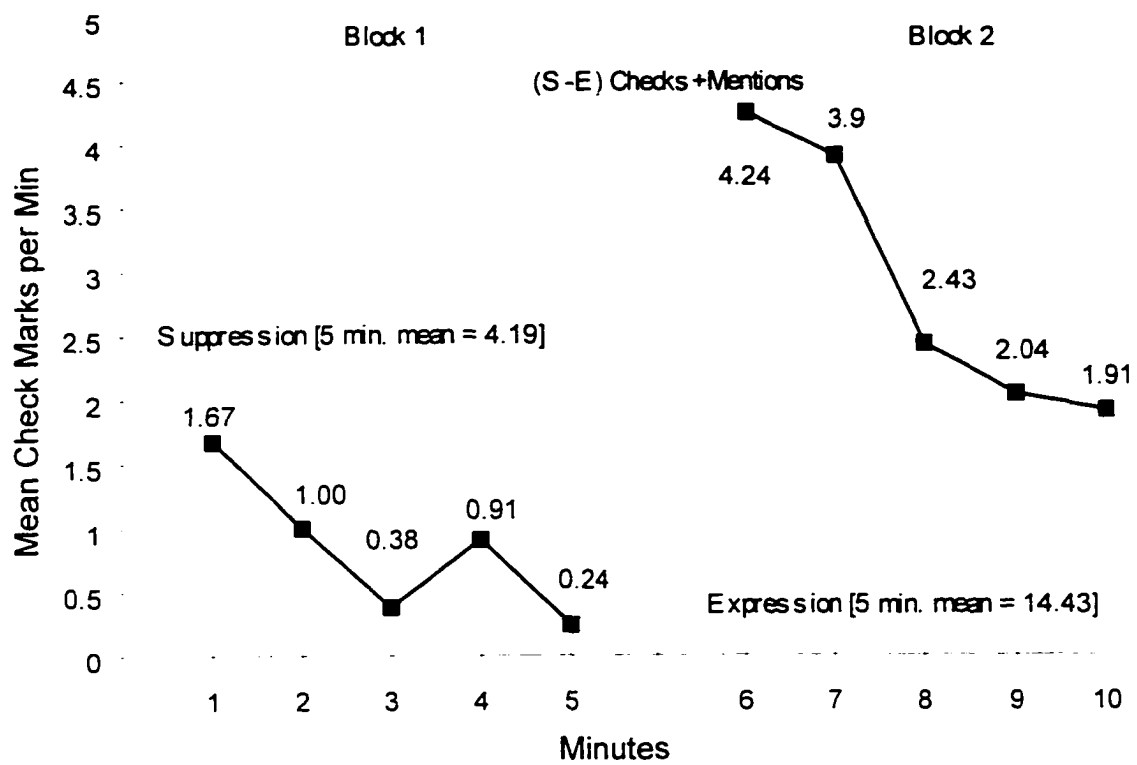


Figure 19 Checks and mentions combined per minute over two 5-minute periods for the suppression-expression condition (S₁-E₂) for the War of the Ghosts stimulus.

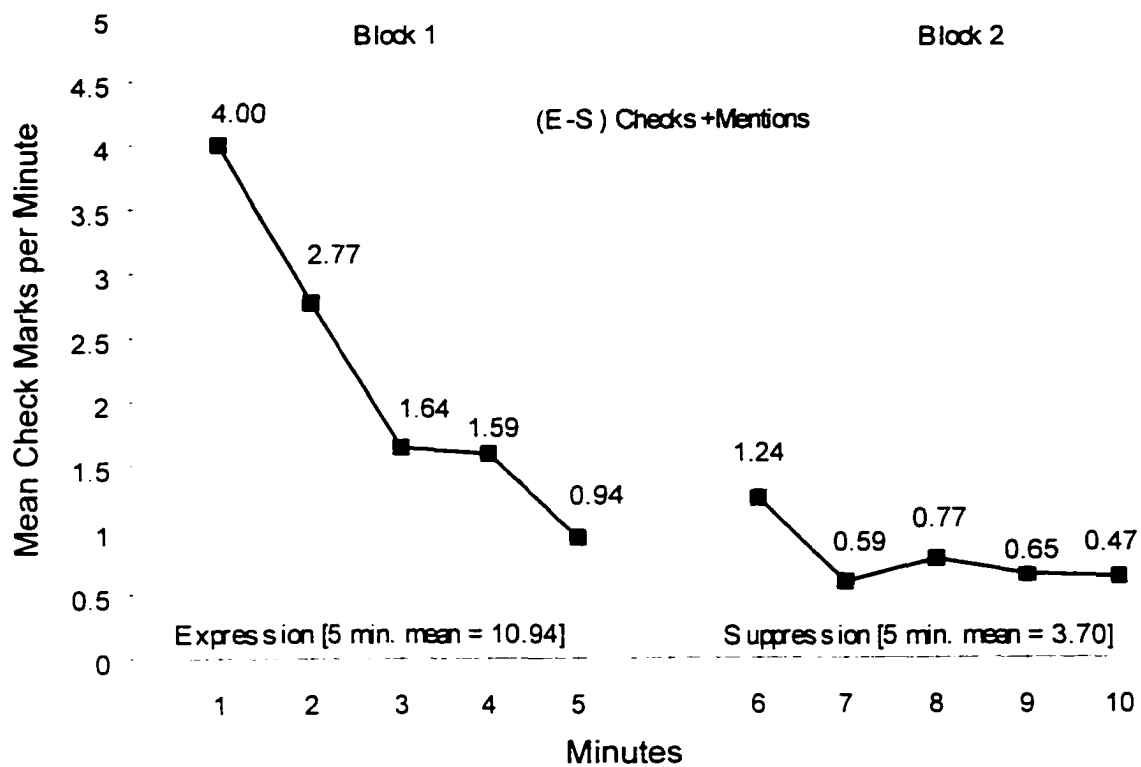


Figure 20 Checks and mentions combined per minute over two 5-minute periods for the expression-suppression condition (E_1-S_2) for the War of the Ghosts stimulus.

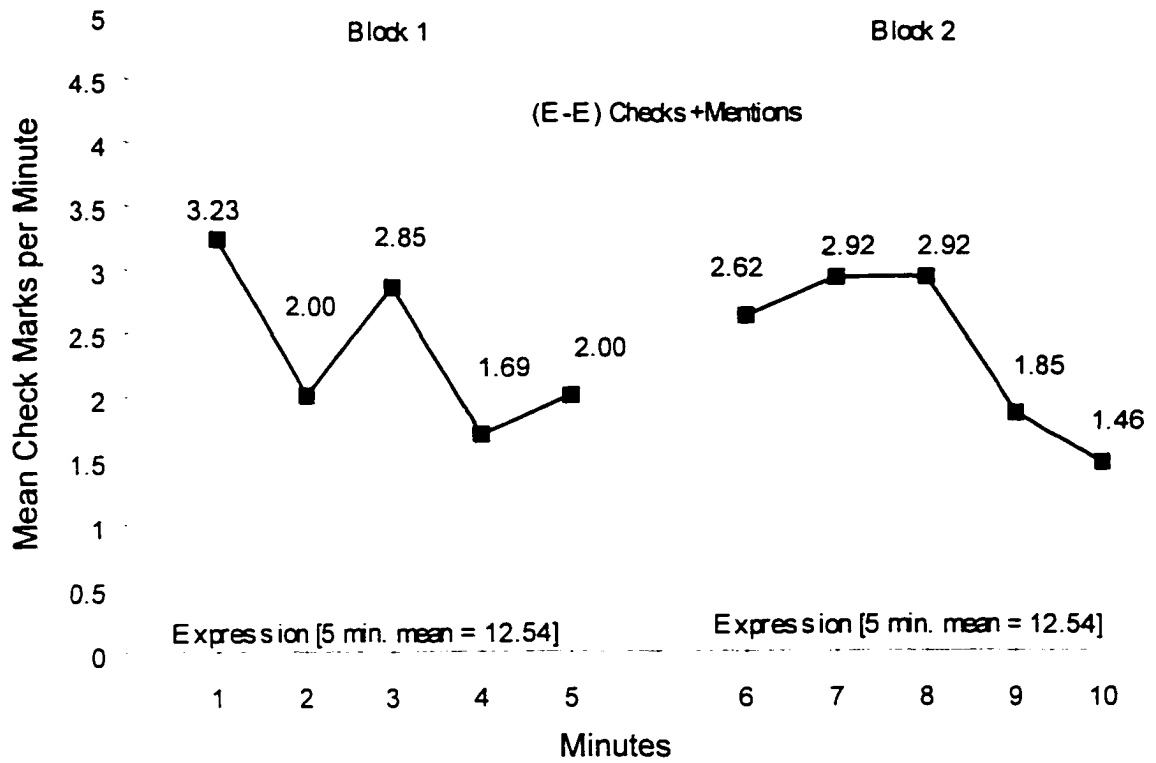


Figure 21. Checks and mentions combined per minute over two 5-minute periods for the expression-expression condition (E_1 - E_2) for the War of the Ghosts stimulus.

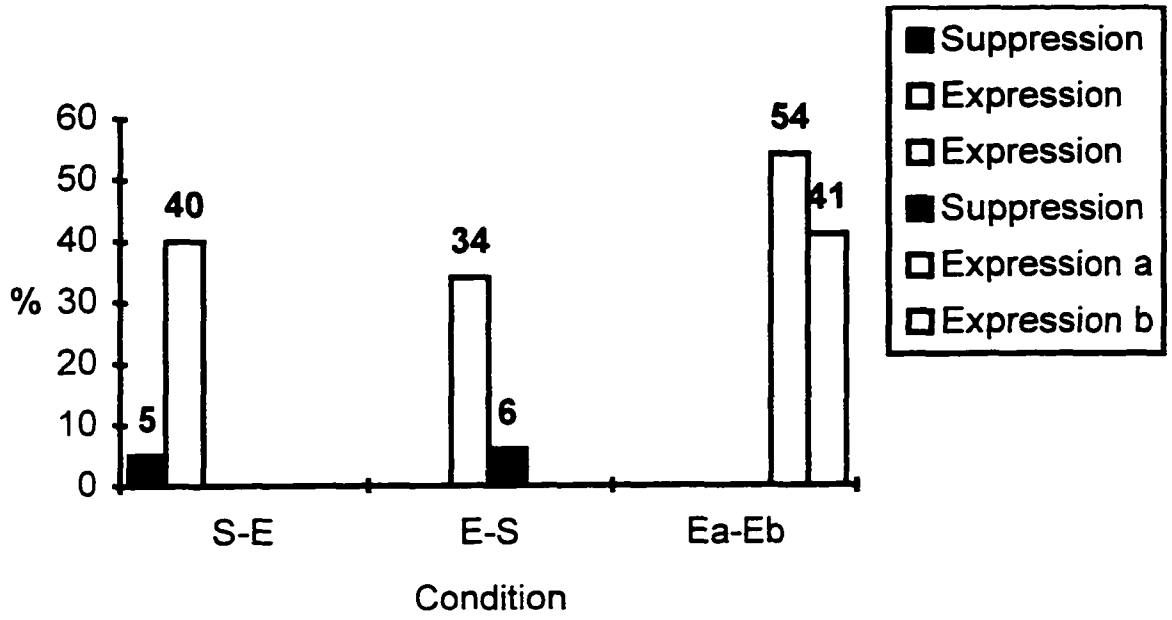


Figure 22. Percent of mentions for the War of the Ghosts (WOG) stimulus.

Judges blind to experimental condition counted the number of times subjects mentioned WOG or something clearly related to the story. The correlation between a pair of evaluators within each time block averaged .93 with a range of .89 to 1.00. Table 2 shows the means for each measure by condition.

Table 2

Measure of Thought by Group and Time-block for Experiment 2 (Stimulus: WOG)

Group	Time-block		
	Sup.	Exp.	Exp. B
Initial suppression ¹			
(S ₁ -E ₂)			
checks only	S ₁ = 3.00	E ₂ = 5.67	
mentions only	S ₁ = 1.19	E ₂ = 8.76	
checks and men- tions combined	S ₁ = 4.19	E ₂ = 14.43	
Initial expression ²			
(E ₁ -S ₂)			
checks only	S ₂ = 2.76	E ₁ = 5.47	
mentions only	S ₂ = .94	E ₁ = 5.47	
checks and men- tions combined	S ₂ = 3.70	E ₁ = 10.94	
Expression expression ³			
(E ₁ - E ₂)			
checks only		E ₁ = 3.38	E ₂ = 3.23
mentions only		E ₁ = 9.15	E ₂ = 9.31
checks and men- tions combined		E ₁ = 12.54	E ₂ = 12.54

1. N = 21

2. N = 17

3. N = 13

Rebound analysis. Once again, as with the stimulus “white bear,” with respect to the most important issue--the reliability of the rebound effect for normal subjects--the WOG experiment produced no significant findings when the expression periods (E_1 and E_2) of the two experimental groups (S_1-E_2 and E_1-S_2) were compared. Additionally, no significant comparisons for any of the thought measures between the expression (E_2) block of the initial suppression group (S_1-E_2) and the second five-minute time-block (E_2) of the control group (E_1-E_2) were measured. Thus whether mismatched or perfectly matched minutes were compared, the results were not significant for a rebound effect. (Nor were the comparisons between the initial five-minute period (E_1) of the initial expression group (E_1-S_2) and the same period (E_1) of the control group (E_1-E_2) significantly different for any of the thought measures.)

The search for consistency within subjects from one period to the next produced no significant correlations for the initial suppression group (S_1-E_2) for any of the thought measures. On the other hand, subjects in both the initial expression group (E_1-S_2) and the control group (E_1-E_2) correlated from time-block to time-block for most thought measures (although mentions alone in the initial expression group (E_1-S_2) correlated only marginally: $p=.055$): initial suppression group (S_1-E_2), checks only, $r(21)=.36$, $p=.053$ (marginal); checks and mentions combined, $r(21)=.43$, $p<.05$; initial expression group (E_1-S_2), checks only, $r(17)=.66$, $p<.01$; mentions only, $r(17)=.47$, $p<.05$; checks and mentions combined, $r(17)=.64$, $p<.01$; control group (E_1-E_2), checks only, $r(13)=.79$, $p<.001$; mentions only, $r(13)=.66$, $p<.01$; checks and mentions combined, $r(13)=.80$, $p<.001$.

It is evident that the above figures on consistency provide the only parallel findings in this experiment with those of Wegner and colleagues (1987). Remember, however, the argument made earlier about the suspect nature of the theory that lack of consistency measured only in the initial suppression group (S_1-E_2) (which is what Wegner et al. [1987] found) could be seen as support for the rebound effect--considering the nature of the tasks to be performed. Yet it may be of some value to suggest an alternate explanation for the finding. Perhaps being instructed to suppress thoughts immediately after exposure to a stimulus allows one to follow that directive more effectively than if asked to suppress after a period of expression. When one expresses first, after exposure, it is possible that, at least for some subjects, the multiple networks activated in the process of expression bleed into the subsequent suppression period whereas when one suppresses first there are fewer memory stores attempting entrance once the expression time block arrives.

Time-line analysis. Time-lines within time blocks followed Ebbinghaus (1885) for all three groups with only three exceptions, mentions only in the second five-minute period (S_2) of the initial expression group (E_1-S_2), which was only marginally significant $F(1,16)=4.33$, $p=.053$) (see Figure 17), and checks only in both time blocks which were not significant. Decrements in thoughts about WOG over time were significant for all other thought measures in both experimental groups and in the control group.

For the experimental groups, a main effect for minutes was significant for all three thought measures: checks alone, $MSE=.22$, $F(4,144)=15.92$, $p<.001$ (see Figures 13,14), mentions alone, $MSE=.27$, $F(4,144)=15.23$, $p<.001$ (see Figures 16,17), and

checks and mentions combined, $MSE=.29$, $F(4,144)=25.80$, $p<.001$ (see Figures 19,20), indicating that over a five-minute block of time significant changes occurred in subjects' response rates. For the control group a significant main effect was also uncovered for all thought measures for minutes, indicating, once again, that significant changes occurred in subjects' responses over time: checks only, $F(4,48)=3.97$, $p<.01$ (See Figure 15); mentions only, $F(4,48)=6.54$, $p<.001$ (see Figure 18); checks and mentions combined, $F(4,48)=6.94$, $p<.001$ (see Figure 21).

A trend analysis resulted in the finding that, for the initial suppression group (S_1-E_2) checks only decreased significantly over time in the suppression (S) period (first five minutes): $F(1,20)=11.63$, $p<.01$, and in the expression (E) period (second five minutes): $F(1,20)=6.53$, $p<.05$ (see Figure 13). Mentions decreased significantly in both time periods: Block 1: $F(1,20)=6.35$, $p<.05$; Block 2: $F(1,20)=12.67$, $p<.001$ (see Figure 16), as did checks and mentions combined: Block 1: $F(1,20)=12.46$, $p<.01$; Block 2: $F(1,20)=22.84$, $p<.001$ (see Figure 19)

For the initial expression group (E_1-S_2), there was a significant decrease in all thought measures in both five minute periods except for mentions alone (as noted earlier) in the suppression (S) period: checks alone, Block 1: $F(1,16)=16.00$, $p<.01$; Block 2: $F(1,16)=4.97$, $p<.05$ (see Figure 14); mentions alone, Block 1: $F(1,16)=16.16$, $p<.001$ (see Figure 17); checks and mentions combined, Block 1: $F(1,16)=22.56$, $p<.001$; Block 2: $F(1,16)=5.86$, $p<.05$ (see Figure 20). In the control group (E_1-E_2) mentions alone decreased significantly, Block 1: $F(1,12)=8.64$, $p<.05$; Block 2: $F(1,12)=5.66$, $p<.05$ (see Figure 18). Checks and mentions combined also had a significant downward trend: Block 1: $F(1,12)=9.18$, $p<.05$ (see Figure 21), Block 2: $F(1,12)=6.05$, $p<.05$.

Thus, on the whole, as with the “white bear” stimulus, within most of the time periods subjects thought less and less about WOG whether they were instructed to think about the story or not to think about it.

Suppression analysis. Finally, subjects given the WOG stimulus were just as capable of suppression as were the subjects in Experiment 1. A main effect for instruction (all checks and mentions combined) in the experimental groups indicated that the expression (E) periods (mean =6.35) elicited significantly more total responses than the suppression (S) periods (mean=1.98), $MSE=1.17$, $F(1,36)=41.86$, $p<.001$

Turning to simple comparisons, for checks alone, the overall mean for both conditions for the expression time blocks of 5.57 was significantly greater than that for the suppression time blocks which had a mean of 2.88, $F(1,36)=12.63$, $p<.001$. The same was true for mentions alone where the overall mean in the expression periods of 7.12 was significantly greater than the suppression time block mean of 1.07, $F(1,36)=51.45$, $p<.001$, as it was for checks and mentions combined where the overall mean was also significantly different in the same direction, with the expression groups having a mean of 12.69 and the suppression groups a mean of 3.95, $F(1,36)=41.86$, $p<.001$.

Simple comparisons in the ANOVA between suppression (S) and expression (E) time blocks for each of the thought measures individually in each of the groups all yielded significant results except for checks alone in the initial suppression group (S_1-E_2). The mean of 3.00 for checks alone in the suppression (S) period for the initial suppression/group (S_1-E_2) was not significantly different from the mean of 5.67 for checks in the expression (E) period.. For the initial suppression group (S_1-E_2), there

were significantly more responses for mentions alone during the expression (E) period than the suppression (S) period (8.76 vs. 1.19), $MSE=1.37$, $F(1,37)=22.94$, $p<.001$. The same held for checks and mentions combined, (14.43 vs. 4.19), $MSE=1.77$, $F(1,37)=14.35$, $p<.001$. For the initial expression group (E1-S2), there were significantly more responses for checks alone during the expression (E) period than the suppression (S) period (5.47 vs. 2.76), $MSE=.78$, $F(1,37)=9.40$, $p<.01$; as well as for mentions alone (5.47 vs. .94), $MSE=1.74$, $F(1,37)=10.13$, $p<.01$; and also for checks and mentions combined (10.94 vs. 3.70), $MSE=1.82$, $F(1,37)=12.96$, $p<.001$. A significant main effect was also found for instruction, (37% vs. 5%), $MSE=.05$, $F(1,36)=40.61$, $p<.001$ (see Figure 22), indicating that there was a significantly higher percentage of mentions in the expression (E) than in the suppression (S) period.

The results thus support the conclusion that a significant degree of suppression can be accomplished by most subjects. Furthermore, for checks alone, 26% of the participants were able to suppress thoughts of WOG completely in the suppression (S) period. For mentions only that figure rose to 45%. Certainly these results run counter to the concept of an initial enhancement effect.

Conclusions. The same conclusions, therefore, can be drawn for the WOG experiment as for the white bear experiment. Neither a rebound nor an initial enhancement effect was supported by the findings; subjects, on the whole, were capable of significant suppression: thoughts about the proffered stimulus diminished significantly over time in almost all of the time periods measured

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Experiment 3

Virtually the same procedures, instructions, and statistics were used for the dictionary selection as for the "white bear" stimulus in Experiment 1 and the War of the Ghosts stimulus in Experiment 2. Appendix I details the "Read and Listen Instructions" for this stimulus, which instructions were proffered prior to the order manipulation components of the experiment (see Appendixes J-L for the exact wording of the "think about" and "don't think about" modules.)

Results and Discussion

Analyses were completed for (a) checks only designating thoughts about the dictionary selection (see Figures 23-25) , (b) mentions only about the dictionary selection (see Figures 26-28), (c) checks and mentions combined for dictionary (see Figures 29-31), and (d) percent of mentions about the dictionary selection (see Figure 32). (Figures 23-32 follow immediately in a block but will be referred to individually and in groups throughout this section.)

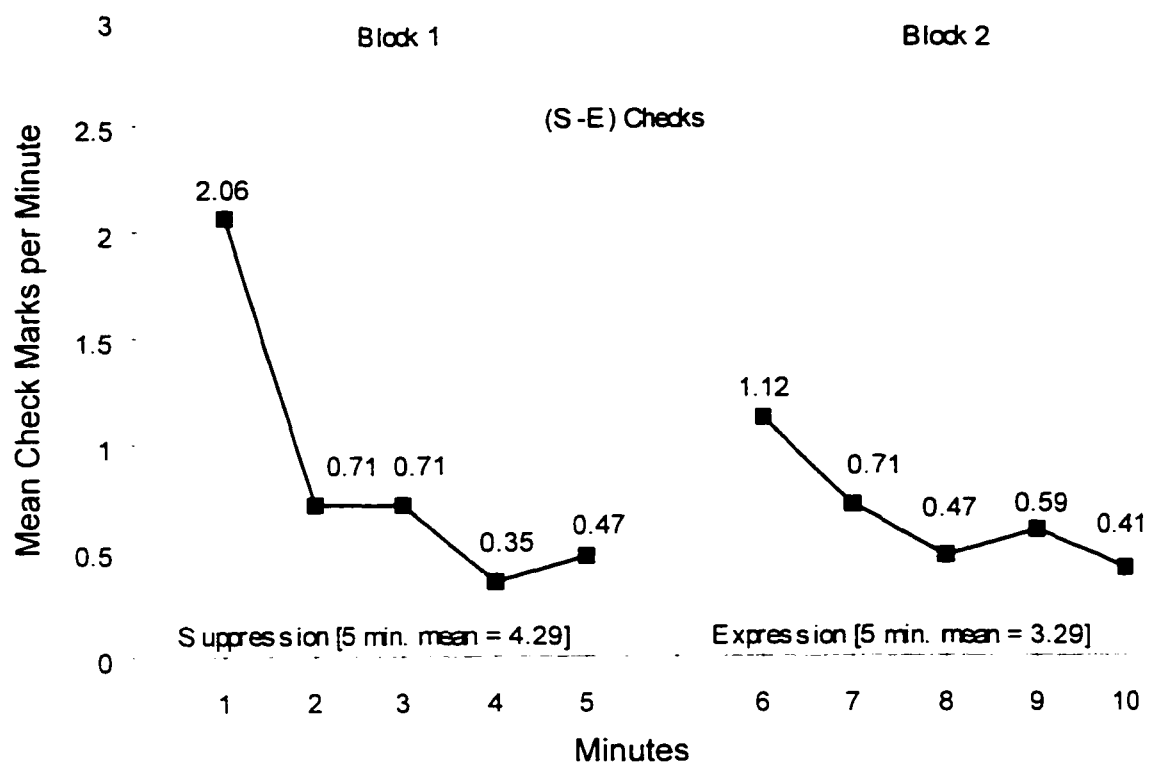


Figure 23. Checks per minute over two 5-minute periods for the suppression-expression condition (S_1 - E_2) for the dictionary stimulus.

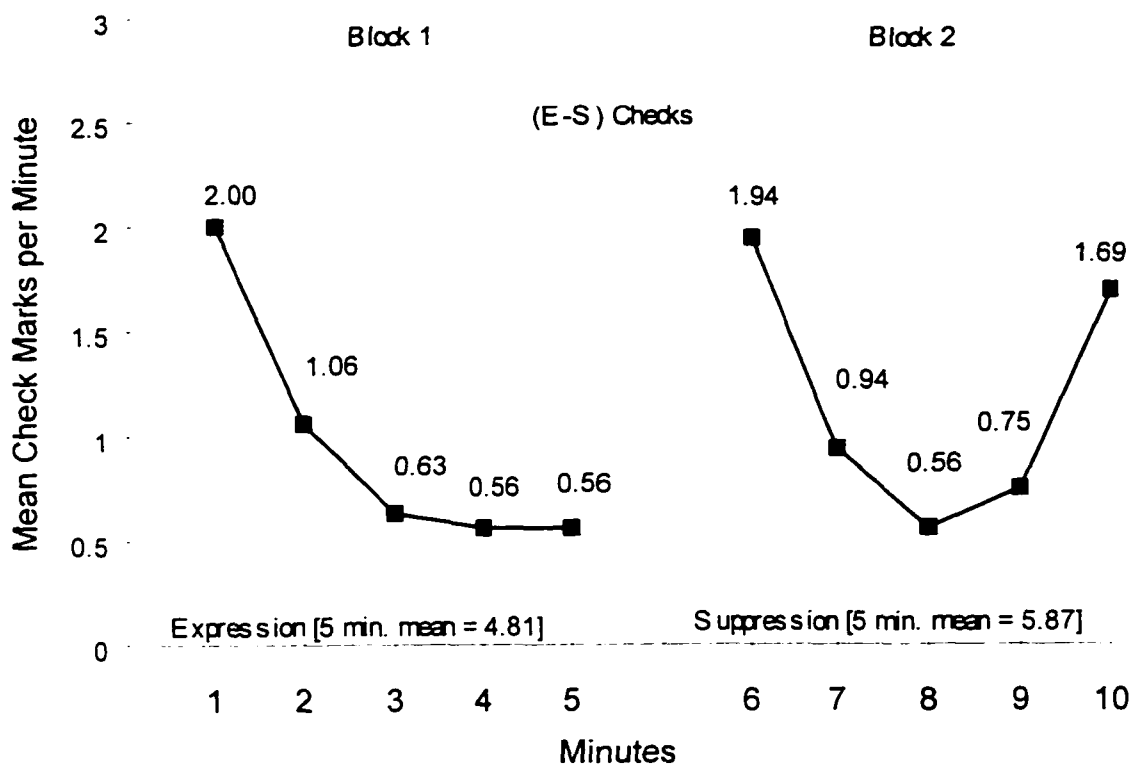


Figure 24 Checks per minute over two 5-minute periods for the expression-suppression condition (E_1-S_2) for the dictionary stimulus.

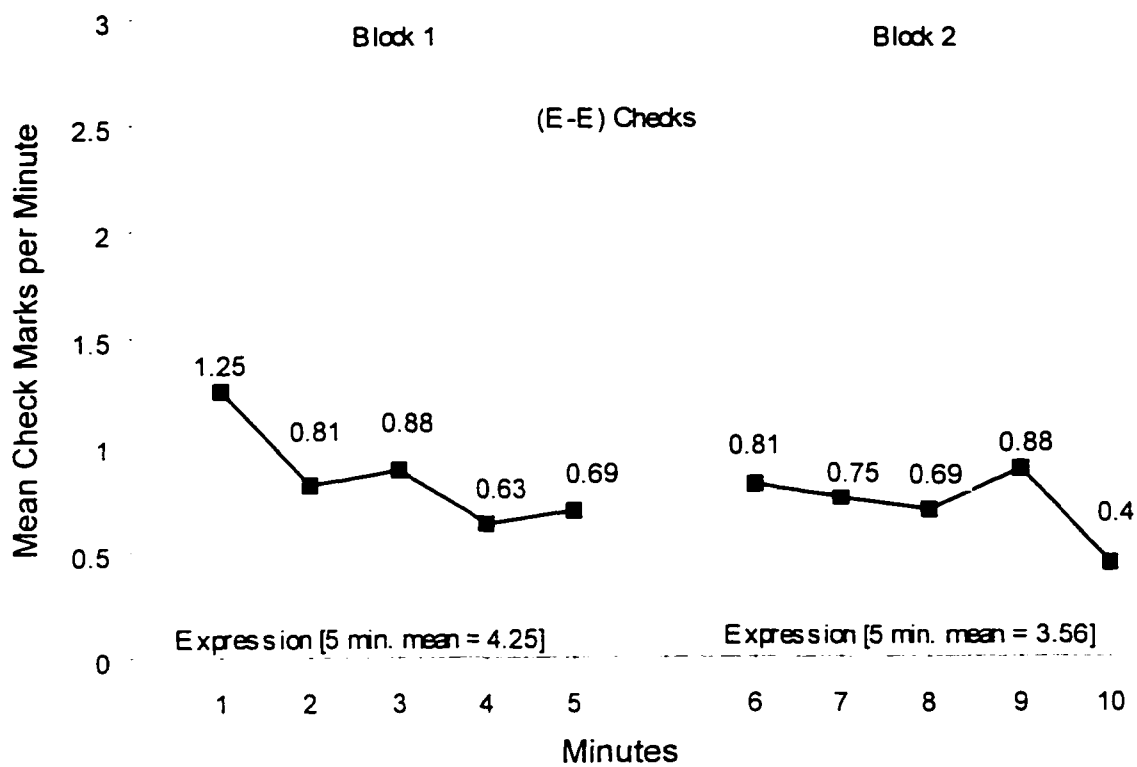


Figure 25. Checks per minute over two 5-minute periods for the expression-expression condition (E_1 - E_2) for the dictionary stimulus.

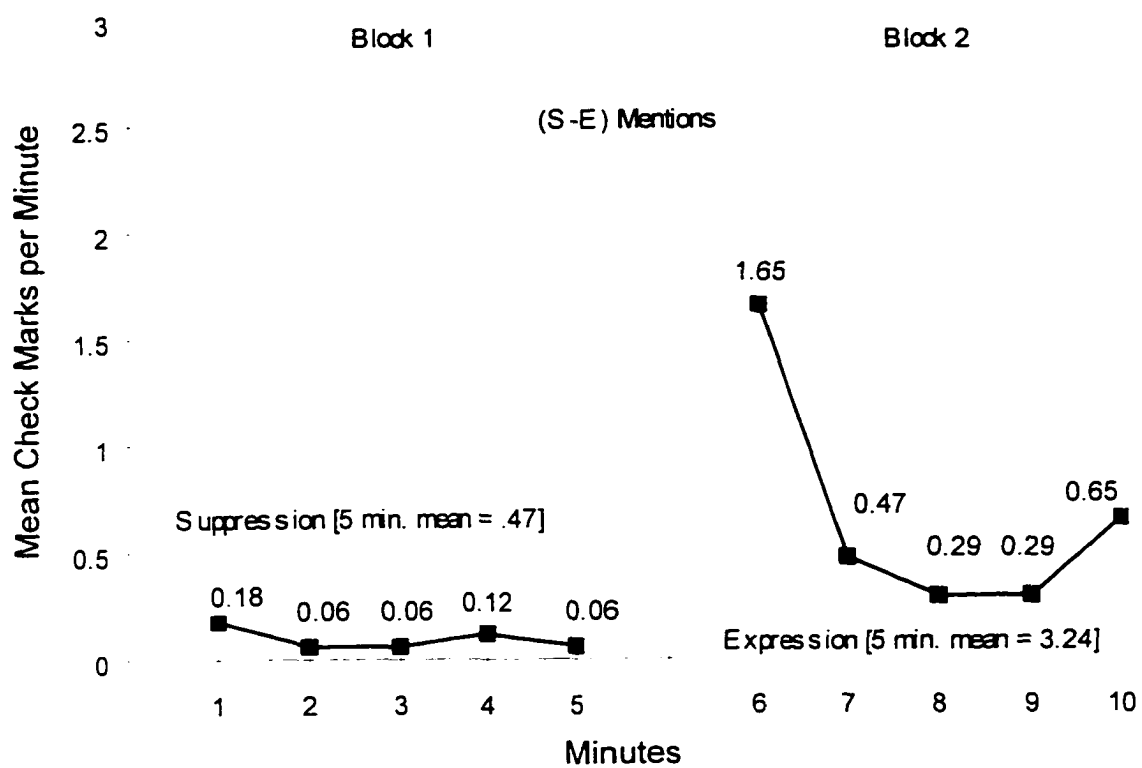


Figure 26. Mentions per minute over two 5-minute periods for the suppression-expression condition (S_1-E_2) for the dictionary stimulus.

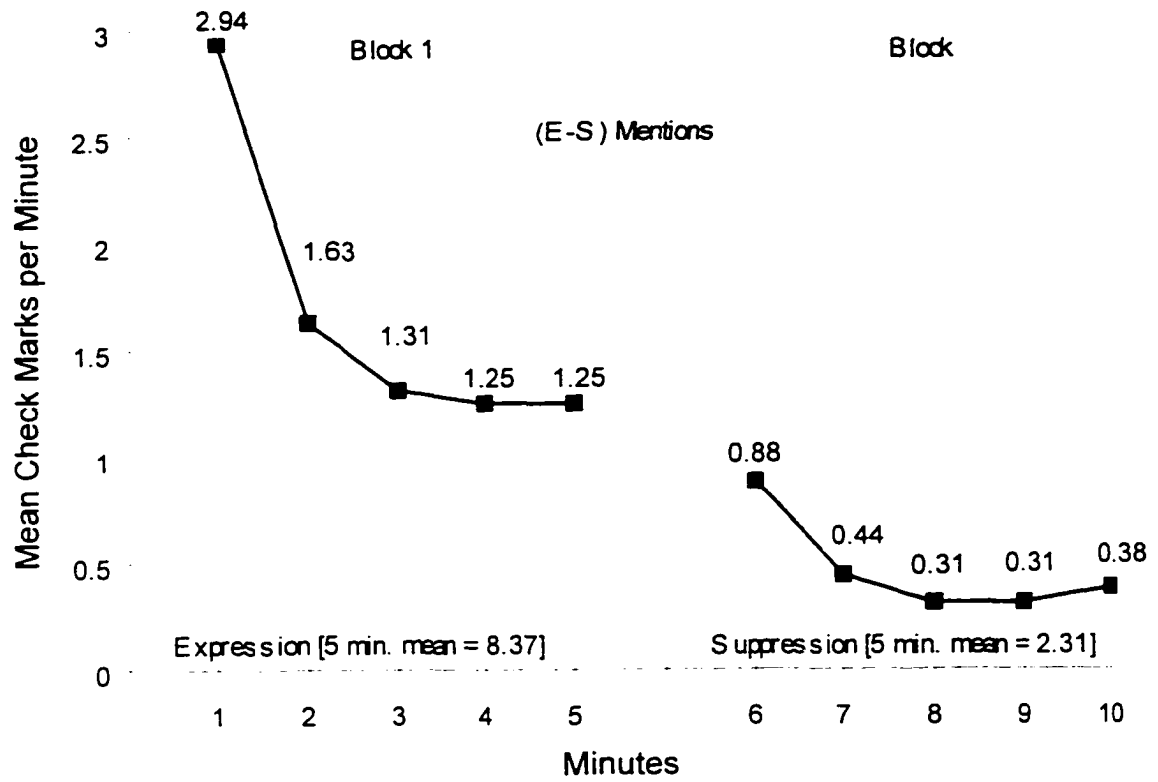


Figure 27. Mentions per minute over two 5-minute periods for the expression-suppression condition (E_1-S_2) for the dictionary stimulus.