
TRANSFERENCE AND SOCIAL CATEGORISATION

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A thesis submitted for the degree of Doctor of Philosophy of The Australian National
University

December 2016

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DECLARATION

The research described in this thesis represents original work undertaken in the Department of Psychology, at the Australian National University. The writing and work outlined in the thesis chapters are solely my own. The contribution of Ashlee Riorden to Study 3 should be noted (see Note 2, Chapter 7)

Andrew Frain

ACKNOWLEDGEMENTS

When young students come to seek advice about qualifying as a lecturer, the responsibility of giving it is scarcely to be borne... Of course, I live only for my “vocation” – but I, at least, have found only a handful of people who have survived this process without injury to their personality. (Weber, 1917/2004, p. 7)

As is the case for many, to the point of cliché, my PhD candidacy has been a marathon affair. The sensation at the time of writing these acknowledgements is the sort of whole of mind and body exhaustion that one might expect after completing an endurance event. I also doubt that I have endured without injury to my psyche, perhaps for the same reasons as those students Weber observed approximately 100 years ago. First and foremost then, I must be thankful for the patience, love, and support of those dear to me. To my family in Canberra and further afield, and to my closest friends, thank you for putting up with me over these trying years. I could not have persevered without you.

Nor could I have persevered without the patience and support of my supervisory panel. To Dirk van Rooy and Kate Reynolds, thank you for the time and opportunities that you have given me, and for your invaluable direction. Your regular insight, both into specific theory and methodology, and into the nature of social psychology as an academic field, has had a huge influence on the contents of this PhD, and my direction as an academic.

This brings me to the other side of the coin. Yes, my PhD has been anything but a frolic - it is more accurate to say that I have *survived* it - but my PhD journey is also something that I look back on with the utmost gratitude. I have gained so much through that journey and it is no exaggeration to say that through my PhD I have discovered my two professional passions: social science methodology and the social identity approach. I also think that my PhD has helped me become a more understanding person; one who is more attuned to the background, experiences, and wellbeing of those around me.

It is for this reason that I now wish to thank those at the ANU Research School of Psychology, as well as affiliated institutions, for providing the academic environment that I look back on now with such gratitude. Of course, it is not possible to thank everyone who has contributed to that environment. There are innumerable colleagues, educators, examiners, and former students of mine whose passing interactions with me have had a profound impact. I must therefore limit myself to the fixtures of my ANU experience.

Turning first to other members of the academic staff, in no particular order thank you Michael Platow, Kate Reynolds, Michael Smithson, Craig McGarty, Ken Mavor, Boris Bizumic, Emina Subasic, the late John Turner, and again Dirk van Rooy and Kate Reynolds. Being a part of your interactions and conversations, often during “Groupthink”, was invariably both intellectually stimulating and energizing, if not sometimes anxiety inducing. I count a number of you among my intellectual and professional heroes; your work and your conduct has been truly inspiring. On this point I wish to make special mention of Craig McGarty and Ken Mavor, as well as fellow PhD Student at the time Daniel Skorich. Your shared thirst for parsimony, theoretical rigour, and “big picture” social psychology, has given me a glimpse of

what the field might someday come to embody. I can only hope that I will be able to help in some small way.

Similarly, to my fellow PhD candidates, those who I spent most time with and who therefore shaped my ANU experience profoundly, thank you. Thank you Li Lim, Kerry O'Brien, Ben Jones, Kathy McNiell, Hugh Webb, Randal Tame, Suzi Keser, Emma Thomas, Aurore Chow, Michelle Quee, Maria Kostyanaya, Emma Croxford, Angela Nguyen, Lisa Stewart, Corie Lin, Shaistha Mohamed, and again Daniel Skorich. I truly believe that most of my learning occurred during our fortnightly reading group discussions. What I know now, I owe in large part to you. Moreover, I have confidence that decades from now our beer-y discussions concerning theory and the field, as well as a smattering of gossip, will be my fondest memories of my PhD candidacy. Without those discussions I do not think my efforts could have been sustained.

Speaking of sustaining my efforts, thank you especially to my love and partner, Ayndri de Soysa. You most of all have borne my frustration, despair, distraction, and isolation. It has meant the world to have your help in developing my intellectual passions, and then share my enthusiasm for them. Indeed, I suspect there are few couples whose highs and lows have been subject to as much social psychological scrutiny. I hope that you will continue to love the social psychology antiquarian (Billig, 1996a) that you accidentally created.

Overall, I owe a great debt to those mentioned either directly or indirectly above. In fact, it is for this reason that I have opted for the collective pronoun 'we' throughout this thesis. I consider this work to be the outcome of a collective endeavour. Yes, the details of the ideas are my own, but the broad form of this thesis reflects a shared understanding. Without implicating anyone in any

particular point, I hope those of you who may read this thesis will recognise some of your own thinking in my writing. Please know that I also see your influence. You all are the giants on whose shoulders I have tried to stand.

Finally, to Azazel, my dearly departed cat, you made those thousands of hours sitting at home in front of the computer that much less lonely. Thank you.

ABSTRACT

This thesis concerns transference as a social psychological phenomenon, where transference has come to mean inferring that further characteristics of a significant other are present in a newly encountered target person after some observation of shared characteristics between those two figures. This thesis argues for the adoption of a social categorisation based approach to transference that is heavily informed by the social identity approach, and *self-categorisation theory* in particular. This approach is contrasted with the *social cognitive model of transference*, which is currently the dominant theoretical account of transference in social psychology. In terms of the empirical contribution of this thesis, three studies are reported that each attempt to test the predictive advantages of a proposed *social categorisation model of transference*. Study 1 leverages the social identity approach concept of *comparative fit* and consequently tests whether the characteristics of other people in the perceiver's *frame of reference* (i.e., in addition to the target of transference) can moderate the extent of transference. Study 2 and Study 3 leverage the social identity approach concept of *perceiver readiness* and test whether the current goals of the perceiver can moderate the extent of transference. Study 3 also seeks to test whether the current goals of the perceiver can moderate the content of transference. Although the results of neither Study 1 or Study 2 conform to predictions, the results of Study 3 provide initial support for the utility of a social identity based understanding of transference. Possible future empirical directions for a social categorical account of transference are explored, as are the theoretical and practical implications, with particular attention paid to the implications for clinical practice. Overall a social categorisation approach to

transference is shown to have some predictive advantages, in addition to providing advantages in terms of theoretical and metatheoretical coherence.

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CHAPTER 1

AIMS AND OVERVIEW OF THIS THESIS

The way that our relationships with those whom we are close to, or our significant others (SOs), influence our interactions with newly encountered people has received a steady stream of attention in social psychology. Since the early 1990s social psychological research has produced an impressive array of findings in relation to the role of SOs in perception. This research has occurred under the banner of “transference”, and it has shed light on the content and structure of SO based perception (e.g., Andersen, Glassman, Chen, & Cole, 1995; Andersen, Reznik, & Manzella, 1996; Chen, Andersen, & Hinkley, 1999; Glassman & Andersen, 1999; Kruglanski & Pierro, 2008; Pierro, Orehek, & Kruglanski, 2009), as well as the relationship between SO representations and other psychological phenomena; phenomena such as the self-concept (Hinkley & Andersen, 1996), role expectations (Baum & Andersen, 1999), parental abuse (Berenson & Andersen, 2006), attachment patterns (Brumbaugh & Fraley, 2006), and ingroup favouritism (Saribay & Andersen, 2007). This research has largely centred around the *social cognitive model of transference* (Andersen & Glassman, 1996), which defines transference as the “activation and use of a SO representation in interpreting and responding to a new person” (Andersen & Berenson, 2001, p. 232).

Andersen and colleagues’ choice of “social cognitive” as the label for their model of transference reflects the connection between that particular model and a broader movement in social psychology (see also Berk & Andersen, 2000). That

highly popular movement is called the *social cognition approach*, which is an approach predominately concerned with the relationship between cognition and the perception of stimuli considered to be social (i.e., humans and other stimuli considered to have “personhood” in some sense). It is through the insights of the social cognition approach that researchers in social psychology have substantially advanced our understanding of the transference phenomenon. The social cognition approach is not without its limitations, however. In particular, the social cognition approach has been subject to persistent criticism from researchers who hail from another movement in social psychology, the *social identity approach*.

The social identity approach and the social cognition approach have a great deal in common. The approaches are concerned with explaining a similar range of social phenomena (e.g., impression formation, stereotyping, social influence) (Oakes, Haslam, & Reynolds, 1999) and were temporal peers, each with critical developments occurring across the 1970s, 1980s, and 1990s. Indeed, both approaches emerged as potential antidotes to a crisis of confidence in social psychology (Hogg & Williams, 2000; Operario & Fiske, 1999). In many respects theorists from both backgrounds were engaged in the same work, using similar methodologies, and ostensibly armed with the same access to social psychological ideas and developments. One might expect then to find social identity and social cognition researchers working closely with one another, producing complimentary explanatory models and collaborating in their empirical efforts. Generally speaking, this has not been the case. While some collegiality and collaboration has occurred, the shared history of the social identity and social cognition approach has also been one of protracted contrast, conflict, and at times acrimony. Really,

what is shared between the two approaches appears to have set them against each other as rivals, rather fostering alliance.

The conflict between the social identity approach and the social cognition approach has meant that the cross fertilisation of ideas across the divide has been inhibited. This does not necessarily mean, however, that the relationship between the social identity approach and the social cognition approach has been unproductive. It may well be the case that the rivalry between the two has been of net benefit to social psychology. In fact, it is a tenet of the social identity approach that a prerequisite for social competition is the presence of comparison groups that are similar, proximal, and situationally salient (Tajfel & Turner, 1979). The social cognition approach, with its vast similarities to the social identity approach, was perhaps ideally placed to create a competitive environment, spurring theorists on to further intellectual achievement and research vigour. At the very least, the social cognition approach has been critical as a point of departure from which to make social identity arguments. As Billig eloquently puts it:

No intellectual theory can be properly understood merely in terms of what the theorist is proposing, but it also needs to be seen in terms of rival ideas which the theorist is opposing. Tajfel's [an architect of the social identity approach] theoretical work is no exception. (Billig, 1996b, p. 341)

The social cognition approach, with its overlapping areas of interest, intellectual heritage, and methodological approach, has acted as an ideal foil for the social identity approach. It is often through contrasts with the social cognition approach that the unique contributions and implications of the social identity approach have been made most clear.

The substantial benefit of the ongoing dialogue between the social identity and social cognition approaches is perhaps best observed in the domain of stereotyping and intergroup relations. Frequently using the social cognition approach as a key contemporary comparison, social identity theorists have been able to advance an understanding of stereotyping that rejects the popular position that stereotypic perception occurs in conflict with reality and is characterised by inaccuracy, exaggeration, and approximation (e.g., Fiske & Neuberg, 1990; Macrae & Bodenhausen, 2000; Operario & Fiske, 2001; Taylor, Fiske, Etcoff, & Ruderman, 1978). Instead, it has been shown that stereotyping can be viewed as a process that is very much engaged with reality, and indeed is a necessary pathway toward veridical perception (Oakes, 2001; Oakes et al., 1999; Oakes, Haslam, & Turner, 1994; Oakes & Reynolds, 1997; Reynolds & Oakes, 1999; Turner, Oakes, Haslam, & McGarty, 1994). This position has been a foundational component of an alternative psychology of intergroup relations, with substantial implications for the management of intergroup conflict. Rather than viewing intergroup conflict as a consequence of individuals' faulty psychology, or *prejudice*, social identity theorists argue that intergroup conflict can only be properly understood with due respect to the very real intergroup circumstances (Turner, 1997, 2001a, 2001b). Further, any effort to manage intergroup conflict that places undue emphasis on individual psychological processes risks distracting from effective social change and entrenching the status quo (Billig, 1976; Dixon & Levine, 2012; Jussim & Eccles, 1995; Jussim, McCauley, & Lee, 1995).

Up until now the social psychological foray into transference has remained largely insulated from social identity ideas. Unlike most other areas of social psychology, which have benefited from attention from both social identity and

social cognition researchers, the consistent research attention that transference has received has been saturated by the social cognition approach. Researchers in the transference space have all been sympathetic to the social cognition perspective, which has meant that over the last two decades no meaningful alternatives to, or deviations from, the social cognitive model of transference have been proposed.

It is our belief that the social psychological study of transference would be enriched by the addition of a social identity voice, just as has been the case for the social psychology of stereotyping and intergroup conflict, as well as management (Haslam, 2001), social power (Turner, 2005), health (Jetten, Haslam, & Haslam, 2012), education (Smyth, Mavor, Platow, Grace, & Reynolds, 2013), creativity (Haslam, Adarves-Yorno, Postmes, & Jans, 2013), etc. Moreover, we believe that the addition of a social identity voice to the study of transference is particularly timely. Transference researchers are increasingly looking to the practical implications of the social cognitive perspective on transference, with interest in the management of transference (Liviatan & Andersen, 2008; Przybylinski & Andersen, 2011) especially within a therapeutic setting (Andersen & Berk, 1998; Andersen & Przybylinski, 2012). These forays into the management of transference bear a strong resemblance to the notions of intergroup conflict management that the social identity approach cautions against. It may be important, therefore, to insert another perspective into that discussion; the hope being to raise awareness of, and potentially avoid, some of the pitfalls of managing social interactions through social psychology, whether they be intergroup or interpersonal. That importance is heightened by the fact that those in clinical settings represent a vulnerable population. The clients of therapists are often already under considerable stress

and the therapeutic setting commonly involves a substantial power imbalance. It is thus all the more critical to ensure that the management of transference in therapy is carefully considered, which should entail a diversity of perspectives.

The overarching goal of this thesis, therefore, is to persuasively introduce a social identity approach to the phenomenon of transference. To that end, the specific aims of this thesis are to a) introduce a social categorisation based account of transference based on the tenets of the social identity approach, and in particular self-categorization theory (SCT) (Turner, 1985; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987)¹, b) accompany that theoretical account with some empirical support, and c) leverage the proposed account of transference to suggest changes to the way in which transference is researched, and how the management of transference is approached.

In the remainder of this chapter we will provide an outline of how this thesis will unfold, and how the case for a social categorical account of transference will be made. This outline is intended to provide a sense of the logic that has been applied to this task.

The structure of this thesis

The structure of this thesis deviates strategically from the structure usually adopted in arguments of this nature. Normally, when arguing for one theoretical perspective on a social psychological phenomenon over another, the first port of call is to provide a review of the literature that draws on existing critiques and points to key areas in the empirical work where the incumbent theoretical perspective does not account well for observations.

There are two reasons that such an approach would not work here. First, in the social psychological literature on transference there are very few existing

critiques. As stated above, there is a degree of homogeneity in the research and, in general, researchers have been in agreement with one another as to the appropriate theoretical approach. Consequently, the focus up to this point has been on extending and applying that dominant theoretical approach, rather than subjecting that approach to critique.

It is also not our position that the incumbent theoretical perspective, the social cognitive model of transference, does not account well for existing observations. As might be anticipated, a body of research that has revolved entirely around a single theoretical perspective has produced empirical findings consistent with its expectations. Our position instead is that the proposed social categorisation based account is similarly able to account for those observations, while also addressing theoretical concerns that have thus far fallen outside of the span of interest of transference researchers. This again reflects the limited critique thus far applied to this literature.

Without existing critiques, or key areas of empirical concern, we must start from scratch in building the case for an alternate theoretical perspective. For this reason, Chapter 2 begins with a general review of the last 25 years or so of concerted social psychological interest in transference. One intent of that review is to demonstrate the substantial influence that the social cognition approach has had on the study of transference in social psychology, in the form of the social cognitive model of transference. Another intent of that review is to detail the key features of the social cognition approach to transference that will later become points of distinction with the proposed social identity approach. Finally, the third intent of that review is to introduce the empirical work that must be accommodated by any proposed theoretical account of transference. In other words, here we describe the

observations of transference that we will later go on to argue are compatible with either a social identity or social cognitive based approach to the phenomenon.

It is in Chapter 3 that we start to hone in on some of the present challenges of the social cognitive based approach to transference. Again, these are not issues previously identified as of concern in the existing literature, but are identified in this thesis as areas where the social cognition approach is vulnerable to criticism. The three areas of concern are a) the challenge of similarity based cueing as an antecedent to transference, b) questions around the storage of SO representations as discrete nuggets of information, and c) questions around the mechanism by which those SO representations are applied to newly encountered people.

Identifying these areas of theoretical complexity sets the scene for our own proposed account of transference, where the social categorisation approach to transference is argued to better face these challenges. In a sense we begin this chapter by introducing some motivation for an attempt to advance our understanding of transference: what are the limitations of present theory that we would want to face more effectively? We then use the remainder of this chapter to introduce the theoretical foundation for our approach to transference. That foundation is the social identity approach, which is a theoretical perspective largely comprising of two social psychological theories. These are social identity theory (SIT) (Tajfel & Turner, 1979) and (SCT) (Turner, 1985; Turner, et al., 1987). Chapter 3 will mostly be concerned with the latter, and in particular will be concerned with the model of social categorisation that arguably lies at the heart of SCT.

One might expect us to immediately follow Chapter 3 with an explication of a social categorisation account of transference. That instead arrives in Chapter 5,

with Chapter 4 dedicated to further setting the scene for that account. Here we are responding directly to the great difficulty that others have had in the past in communicating across the social identity to social cognitive divide. If our goal is to *persuasively* introduce a social identity approach to the phenomenon of transference, where the audience includes social cognitive researchers, then it would be foolish to ignore the common key points of misunderstanding. The intent in Chapter 4 is therefore to “head off at the pass” a number of issues that have previously acted as a barrier to the acceptance of social identity based approaches to social phenomenon. The first of these relates to the difference between an *objectivist* and *social constructionist* approach to social perception. The social identity approach is aligned philosophically with social constructionism, which broadly speaking is the expectation that reality is always subjectively understood, whereas the social cognition approach is rooted in objectivism, which tends to foster the sense that subjectivity should be avoided. Without some introduction to the social identity approach’s assumptions about the perceiver’s relationship with reality, some of the more specific tenets of the approach are likely to seem misguided, if not incoherent. The second, and related, issue likely to impede persuasion is the different conceptualisations of social categories as a psychological phenomenon. Here too the social identity approach and social cognition approach have fundamentally different presumptions. For social cognition researchers, psychological social categories deal with collections of individuals specifically. In contrast, for social identity theorists social categories are implicated in the perception of single individuals also. Drawing attention to these different views, and some of the reasons for the divergence, again is intended to address in advance a number of concerns that may otherwise prove a

distraction and hindrance. Chapter 4 then concludes with a commentary on the social identity literature. This occurs in recognition of the fact that the social identity approach can be particularly impenetrable for newcomers. We see merit in spending some time discussing how someone from a social cognition background might best navigate that literature and avoid some of the misapprehensions that frequently arise.

The social categorisation approach to transference is then introduced. In Chapter 5 this comes in the form of a specific cognitive model of transference, which we have named the *social categorisation model of transference*. As we articulate the key aspects of that model, it will be seen that we draw very heavily from the social identity approach, and the tenets of SCT specifically. For instance, the cognitive mechanism argued to underpin transference is the *accentuation of intraclass differences* that naturally follows from *social category salience*, where in the model a SO and target can form the basis of an inclusive social category; social category salience and accentuation both being central elements of SCT. Similarly, when it comes to the antecedents to instances of transference, this is argued to involve an interaction between perceiver contributions to perception and stimulus contributions; the former is encompassed by the concept of *perceiver readiness* while the latter sits within the concept of *fit*. This perceiver readiness by fit interaction is also lifted directly from SCT. In the course of introducing the social categorisation model of transference we make clear the ability of that model to account for many of the existing social psychological observations of transference. More critical for our argument in favour of a social identity approach, in this chapter we close by turning our attention to some of the immediate advantages of that model. In particular, we explain how this model better prepares us to face the

three key limitations of the social cognition approach to transference that we identified in Chapter 3. They were: similarity based cueing, SO representation storage, and SO representation application.

From here we turn to the empirical contribution of this thesis. In Chapters 6 and 7 we report three studies that serve as initial empirical tests of the social categorisation model of transference. The rationale behind all these tests is the same. Here we use the tenets specific to that model to derive predictions about how transference should unfold in an experimental context. If those predictions are supported, and because those predictions could not be derived from the currently dominant account of transference (i.e., the social cognitive model of transference), then this may be taken as evidence that the social categorisation model of transference should be a preferred model of the phenomenon. Such empirical support would complement the theoretical advantages of the social identity based model already identified in Chapter 5. The focus for Study 1 is on the fit element of the perceiver readiness by fit interaction, while in Study 2 and Study 3 predictions are derived from the perceiver readiness concept as articulated in that model.

In Study 1 and Study 2 the results were not in line with our predictions, meaning that these studies cannot serve as evidence for the social categorisation model of transference. Indeed, in those studies we were not able to replicate the basic social psychological transference finding that, when a newly encountered target person resembles a SO, perceivers will be more likely to ascribe SO characteristics to that target person. In Study 3, however, we were able to replicate the basic transference finding, and were also able to obtain results that reflected our additional social categorisation based predictions. In that study we observed

that both the extent of transference and the content of transference are constrained by perceiver readiness concerns, and in particular the processing goals of perceivers. Study 3 thus serves as initial empirical support for the proposed model of transference, in addition to being a critical independent replication of findings frequently reported in the social psychological literature concerning transference.

Chapter 8 begins a general discussion, with this chapter dedicated to a reflection on the empirical program as a whole. Here, we take note of what has been achieved in these three studies, but also dedicate time to exploring the limitations of that empirical program. In particular, we are careful to point out that although our results provide some preliminary evidence for the predictive utility of the social categorisation model of transference, at least in comparison to the social cognitive model of transference, we have not obtained evidence of the social categorical nature of transference *per se*, which is critical to challenging a social cognition approach to the phenomenon. With this in mind, we explore a number of future possibilities for the empirical study of transference as a social categorical phenomenon in the social identity sense. In Chapter 8 we also describe a number of research directions for social categorisation in general, irrespective of whether SOs are involved. The argument for doing so is as follows: if transference is an instance of social categorisation, then advances in our understanding of social categorisation will necessarily enrich our understanding of transference. In the pursuit of a social psychological account of transference one should therefore consider current challenges for social categorisation theorising, and indeed theories of cognitive categorisation more generally, as well as possible avenues for their resolution.

Our general discussion continues in Chapter 9, with this final chapter focused on further theoretical and practical implications for the social categorisation model of transference. We explore a number of ways in which that model may impact three areas of interest that were encountered in our earlier review of the social psychological literature concerning transference. These are a) transference and other social psychological phenomena, b) the relational self, and c) transference in the clinical domain. We see this exploration as especially justified because, even without strong empirical support for the model, the proposed account of transference is particularly parsimonious. Unlike the social cognitive model of transference, the categorisation based account of transference advanced here proposes no new mechanisms and no special cognitive processing features. In fact, our argument is that transference is, cognately speaking, an unremarkable outcome of standard social categorisation processes. The last of these, transference in the clinical domain, returns us to the ideas introduced at the opening of this thesis. It is here that we once again note the parallels between the emerging intervention suggestions concerning transference and the long standing interventions concerning intergroup relations that centre around individual psychology. Further, with a social identity approach to transference now fully elucidated, we propose alternative ideas around how transference might be appraised, and subsequently managed, in therapeutic settings.

Summary

Overall the goal of this thesis is to make the case for a social categorisation based approach to transference that is heavily informed by the social identity approach, and SCT specifically. We attempt to make this case by introducing the social categorisation model of transference, discussing the theoretical advantages

of that model, and then reporting some initial empirical tests of that model. We then use this model as the basis for proposals about how transference should be best researched as a social psychological phenomenon and how the management of transference should be best approached.

We have argued above that transference has to date remained “*largely* insulated from social identity ideas” (emphasis added). The subtext here is that this is not strictly speaking the first time that the social identity approach has been brought to bear on transference. In the course of researching this thesis it became apparent that Hogg (2001) has also advanced a SCT based account of transference, if only very briefly. That account is so brief, in fact, that we can reproduce it here in its entirety:

[T]here are some interesting parallels between SCT’s explanation of group membership-based perception and Andersen’s social cognitive model of interpersonal transference (Andersen & Berenson, 2001; Chen & Andersen, 1999). Andersen explains that people form exemplar-type cognitive representations of interpersonally significant others (e.g., parents, lovers) that are stored in memory (cf. prototypes of social groups). The representation can be triggered (automatically or more deliberately; cf. salience) by encountering a new person who somehow resembles the SO (cf. social categorisation), and this leads to a “transference” of the contents of the representation to the new person, who becomes imbued with the properties of the relevant SO (cf. prototype-based depersonalisation). Andersen also believes that *connection* (defined in terms of intimacy, tenderness, and belonging) is a basic human need and that the representations of SOs encompass the need for connection. Thus

transference engages a process of connection with the new person (e.g., Andersen et al., 1996). The motivation to affiliate is a consequence of transference. (Hogg, 2001, p. 328, emphasis in original)

Needless to say, the treatment provided in this thesis of the potential connection between transference and SCT is far more detailed. More substantively, and as will be seen in the coming chapters, we are far less accommodating of the social cognitive model's *representation storage, activation, and application* approach that is implied by Hogg to be congruous with SCT's account of social perception. Indeed, following others in the social identity tradition, we feel it is more illuminating to attend to the incongruities between the two approaches.

It may be said that there is a second goal to this thesis, one that is intertwined with the first. That goal is to enact an instance of *integrationist social psychology*. As will become clear, we have come to accept the long standing critique that the field of social psychology is severely hampered by overspecialisation and redundancy; the result being a field that is a) increasingly riddled with unaddressed internal inconsistencies, b) largely impenetrable to non-experts, and c) all too often contributing only trivially to "real world" psychological and societal challenges. In short, social psychology is not living up to its promise as a social science. What is the appropriate recourse, or treatment, for this state of affairs? A concerted and persistent effort is needed on the part of researchers toward integration. Researchers must be on the lookout for, and then pursue, opportunities to combine research streams and bring disparate observations together under encompassing theoretical frameworks; the desired end result being a social psychology that is unified around a central theoretical framework, much in the same way that has been achieved for the "hard" sciences. This thesis represents

one small step in that direction. Our advocacy for a social categorisation based account of transference is an attempt to absorb transference into the range of social-perceptual phenomena that are already accepted as cognitively founded on social categorisation. In this way we hope to help move social psychology marginally closer to the state of unity and coherence that some have argued is definitional of a true science (Staats, 1983). Indeed, Staats' quote below calls for exactly this kind of endeavour:

There are few theoretical studies to draw on that have already unified some of the schisms in psychology; there are few theoretical studies that have systematically reduced the redundancy and artificial diversity in psychology; there are few studies that have bridged the differences between some of the opposed methodologies in psychology; and so on. Consequently, the grand, unified theorist must confront those tasks herself or himself, with little foundation. (Staats, 1991, p. 908)

Our ideal would be that the theoretical and empirical work reported in the following chapters will prove useful for social psychology's future "unified theorists". May our efforts someday make the herculean task of unification that little bit easier and that little bit less lonely.

Notes

1. Although this thesis conforms to British English spelling conventions, the name self-categorization theory retains its original American English spelling.

CHAPTER 2

TRANSFERENCE IN SOCIAL PSYCHOLOGY

What follows is an overview of the social psychological study of transference that has occurred to date, henceforth *the social psychology of transference*. This overview will follow approximately the chronology of transference research, and will focus on key thematic developments in the field. Specifically, we will begin with transference's first appearances in the social psychological literature, then explore the development of the social cognitive model of transference, and finally provide coverage of the subsequent research trajectories that stemmed from that social cognitive perspective. It is those research trajectories, and in particular the corresponding empirical observations, that must be able to be reconciled with any alternative theoretical approach to transference.

In term of those trajectories, we have clustered these together under three broad themes. In the first we will review the social psychological exploration of *the content of transference*. We will look at examples where transference researchers have investigated the type of content, or information, associated with a SO that may be brought to bear on a newly encountered person. Second, we will provide some review of the development of the *relational self* as a theoretical perspective, which has been developed on the back of transference research. It is the most substantial theoretical extension to date of the social cognitive model of transference. Moreover, as a theory of self-concept, like the social identity

approach, it is particularly close to our own interests. Finally, in the third subsection, we will review research that has explored *transference alongside other social psychological processes*. In other words, we will briefly also turn our attention to research that has sought to identify where this particular social cognitive process sits in relation to other cognitive processes of interest to social psychologists. There is, of course, some overlap with this theme and the two other thematic chapter sections, and *vice versa*, but this structure will suffice to help digest this wide-ranging body of research.

Prior to delving in to the social psychology of transference, however, we will first briefly take note of the clinical and psychodynamic research setting from which contemporary transference research in social psychology emerged. Here the origins of transference as a topic of academic interest will be described, the intent being to contextualise this thesis and its message for those unfamiliar with transference as a research subject.

Transference in clinical psychology and psychoanalysis

Transference received its first academic attention from those in the psychodynamic tradition, well before social psychology took interest. In fact, it was with none other than Freud that transference gained academic notoriety. Freud introduced the concept of transference chiefly as a counter-therapeutic phenomenon (Breuer & Freud, 1895/2000; Freud, 1912/1950), where transference was primarily the act of making the physician the target of disruptive fantasies and impulses (see also Freud, 1915/1993). Transference thus represented a key source of resistance to the successful treatment of patients whose full development of the libido had been impeded. Freud made a number of assertions as to the key features of transference. *Inter alia*, he argued that the

content of transference may vary widely (e.g., encompass both negative and positive feelings), that the mechanics of transference involve relational interactions that are mentally stored as patterns of behaviour, akin to stereotypes, and that what makes transference notable is the deviation from otherwise rational perception (Breuer & Freud, 1895/2000; Freud, 1912/1950).

These initial ideas were impactful. For clinical researchers and practitioners transference still primarily represents the impact of the maladaptive interpersonal habits of a patient on the therapeutic context. There have, of course, been developments within this theme, three of which are worthy of mention here. First, the theorised psychosexual underpinnings that are so characteristic of Freud are, for the most part, gone from modern clinical accounts of transference. These have been replaced with a more generalised causal picture, where challenging and disruptive patterns of interpersonal interaction may have developed for any number of reasons; although that development is often attributed to traumatic experiences with SOs (Greenson, 1965; Weiss, 1986a). This is more in line with Sullivan's concept of *paratraxic distortion*, which describes a similar phenomenon as Freud's transference. In paratraxic distortion people develop patterns of interpersonal behaviour, or *dynamisms*, that play out with a therapist. The source of these dynamisms are a patient's past close relationships and when misapplied to a therapist the result is a "paratraxically illusory personal characterisation" (Sullivan, 1940, p. 235). Paratraxically illusory personal characterisations can entail a wide array of content (e.g., they can be either positive or negative), and are also considered to be a deviation from otherwise rational perception.

The second development in the study of transference was the expansion of the role of transference in the therapeutic context. For many clinicians

transference is now seen less as a hindrance to therapy and more as a part of their therapeutic arsenal. Transference from SOs to a therapist has been viewed as a window, for both therapist and client, into the impact that past relationships are having on present behaviour (Horney, 1939; Safran & Segal, 1990; Sampson et al., 1986). Transference is also commonly now seen as a potential foundation upon which a *therapeutic alliance* may be built (Fenichel, 1939; Greenson, 1965; Stone, 1961), where a therapeutic alliance between the therapist and the client is often regarded as critical to the success of clinical treatment¹. Third and finally, some in the clinical sphere have gone on to reject transference in this psychoanalytic tradition as a meaningful phenomenon (Bandura, 1969; Safran & Segal, 1990). This is not a research development in the obvious sense, but it is important to note in order to avoid the impression that transference is a dominant feature of all modern clinical perspectives.

The clinical interest in transference has had a substantial impact outside the context of psychological research and clinical practice. As it stands the concept of transference has a vibrant life in the common lexicon, and it is not unusual to hear transference invoked as an explanatory tool for bar stool psychologists. Indeed, it not an unreasonable wager that you, the reader, without exposure to the transference literature, have in the past suggested that someone's unusual, but familiar, interpersonal interactions are outcomes of transference from another past relationship or experience. Why has transference experienced such popular appeal? One possibility is that transference's popularity reflects the powerful role that the phenomenon plays in our everyday social interactions. That is, psychologists have simply provided the label for what is essentially an omnipresent and intuitively apparent aspect of social relations. In this scenario

transference, by whatever name, was always going to be part of the lay analysis of human behaviour. This would likely be the explanation given by social psychologists who have taken an interest in transference. As will be seen in the next chapter section, a key message of that social psychological literature is that transference should be thought of as a day-to-day perceptual phenomenon, rather than as part of the fringes of human social functioning.

First social psychological attention

Aside from a handful of mentions (Higgins & King, 1981; Sarbin, Taft, & Bailey, 1960), for a long time social psychology left the phenomenon of transference largely untouched. It was not until 1990 that the first social psychological paper dedicated to transference was published, and even then, this was to some extent transference *redefined*. Authors Andersen and Cole (1990) recast transference and were careful to shed some of what was characteristic of the clinical and psychoanalytic approach that had come before. First, and without disrespect to what was accomplished by clinicians and psychoanalysts in the area, Andersen and Cole turned away from the focus on pathology and therapy in their thinking about transference. They saw an opportunity to view transference entirely as a general perceptual process, in action across a broad array of contexts and in no way defined by particular maladaptive interpersonal outcomes. Second, and facilitated by the shift away from an emphasis on interpersonal outcomes, they made the SO the critical defining feature of transference, where a SO is defined as any person who has been important and influential in an individual's life. Said otherwise, Andersen and Cole took the early clinical interest in past experiences with the SO as a source of patterns of interpersonal behaviour and made the *SOs themselves* the source, and only source, of transferred content. Here they drew less

so on Freud's transference, and more so on Sullivan's *paratraxic distortion*, essentially making the latter the new meaning of transference. In paratraxic distortion a perceiver's assumptions and knowledge about a SO of theirs is used as the basis for judgements about new people (Sullivan, 1940). They thus defined transference as a phenomenon whereby "memory representations of SOs can be activated in social interaction and, when they are, that they can influence inferences about new people, interpersonal expectancies, and affective responses" (1990, p. 385). The 1990 paper introduced transference to social psychology as a day-to-day perceptual phenomenon whereby perceivers may use their memories of SOs to assist them in forming impressions of newly encountered people.

From this new starting point Andersen and Cole connected transference conceptually with other social-perceptual processes under investigation in social psychology. They positioned transference as highly comparable to processes such as social categorisation and schema activation, in much the same vein as had been done for paratraxic distortion three decades earlier (Secord & Jourard, 1956). Further, by specifying memories of SOs as the source of content for transference, and by drawing on the previous work of Cantor and Mischel (1979), Andersen and Cole were able to operationalise transference in a way that was ideal for investigation using social psychological experimental techniques; the presence of transference was said to be detectable via the appearance of SO characteristics in descriptions of newly encountered persons.

Study 3 of the 1990 paper is the outcome of these theoretical manoeuvres. In that study participants were asked to nominate a SO of theirs and list features of that SO. Then, in an ostensibly unrelated second research activity, participants completed a memory task: they were required to learn characteristics of a new

person, or “target”, and then accurately identify whether a series of characteristics was, or was not, a characteristics of that target in a subsequent recognition task. For Andersen and Cole a mistaken declaration by participants that additional characteristics of their SO were also characteristics of the target may be an indication that the process of transference was affecting the perception of that target. Thus, “false-positives” for SO characteristics under certain conditions could be used to experimentally demonstrate that transference was occurring.

At this point it is appropriate to take note of the specification of “new people” as the targets of transference, which is a restriction that is also not present in the prior clinical literature. In all likelihood this reflects the influence of methodology on theory, rather than the other way around. The above empirical demonstration of transference is facilitated by the *tabula rasa* quality of newly encountered people. Transference studies where the target person is previously known would be additionally complicated by the potential for other sources of inference to mask or moderate possible transference effects. It is this methodological constraint that permeated back into the theory; it appears that to create congruence between the methodological and the theoretical the social psychology of transference has become about the perception of newly encountered people, despite the fact that outside of social psychology the target of transferred content can be anyone. The point is not that this is a major concern. It is simply an explanation for why the range of targets of transference has been restricted. Indeed, there is reason to believe that transference researchers are not particularly wedded to this direction in thinking. The social psychology of transference has been more recently described as closely aligned with Greenson’s definition of the

phenomenon (Andersen & Przybylinski, 2012), which does not specify the destination of transference as being newly encountered people:

Transference is the experiencing of feelings, drives, attitudes, fantasies, and defenses toward a person in the present which are inappropriate to that person and are a repetition, a displacement of reactions originating in regard to significant persons of early childhood. (Greenson, 1965, p. 156)

Greenson does, however, view the source of transference as SOs from early childhood, which as we have seen is more narrow than the definition introduced into the social psychological literature. In Andersen and Cole's conception of transference the source of transference may involve memories or characteristics from *any* SO, regardless of whether that person became important to the perceiver during childhood or later in life. Again, this reflects the move away from transference as involving particular patterns of interpersonal interaction, toward transference as an everyday phenomenon.

Andersen and Cole go on to argue that SO representations are cognitive structures that are likely to be highly accessible and distinctive, as well as particularly rich in content. Consequently, they reasoned that although SO memories function similarly to social categories and schemas, SO memories should be *more powerful* sources of inference in social perception. In other words, transference was not just special because the source of information was SO memories, but was also a special case because, all things being equal, transference should be the inferential process of choice when seeking to understand newly encountered people. Studies 1 and 2 of that paper addressed this aspect of transference. In both studies Andersen and Cole compared the amount of features listed, time taken to list features, for a SO, a trait, and a stereotype. In Study 2 they

also compared the associative relations between features listed for the three types of stimuli, reasoning that mental representations that are distinct will possess features that are less readily associated with other mental representations. Overall they found that when describing a SO, participants listed more traits, listed those traits faster, and listed traits that were less concurrently descriptive of the other types of stimuli (i.e., the trait and the stereotype), thus supporting the *special* nature of SOs as a type of memory or mental representation.

On this empirical front there is some scope to critique what amounts to the first substantive foray into transference within social psychology. Although the authors argue that they ensured that the SOs, traits, and stereotypes were equivalent in terms of relevance to participants, the steps taken to ensure this were far from water tight. For example, in Study 2 the stereotype stimuli were generated by asking participants to nominate a noun that describes their SO, then presenting that noun back to participants as the stimuli. While this ensures that the stereotype stimuli are relevant to the participants perception of their SO, this hardly ensures that the stereotype is equivalently relevant or meaningful to the participant. Really, a stereotype that would be intuitively comparable to a SO in terms of relevance to the perceiver would be an ingroup that the perceiver is highly identified with. It is our view that the demonstrated 'special' qualities of the SOs are just as likely outcomes of the comparative banality for participants of the traits and stereotypes they were compared against². Leaving this limitation aside though, the 1990 paper remains significant as the beginning of a story of the social psychology of transference. The fact remains that Andersen and Cole's theorising in this first paper was in many ways a mould from which the social cognitive model of transference was cast. As we will shortly see, themes around the uniqueness of

SO memories and mental representations, as well as the potency of such representations in influencing our impressions of new people, remained front and centre in subsequent transference publications in social psychology.

Before getting to that model though, it is worth touching on two other social psychological papers that also came prior to the formal statement of the social cognitive model of transference. These built on the foundation provided by that first transference paper and that also explored transference empirically. First, Andersen and Baum (1994) demonstrated the potential for transference in this new social psychological sense to additionally impact affect. They achieved this by asking participants to nominate both positive and negatively experienced SOs and then measuring liking ratings for the target person, as well as the transient affective state of participants. On both measures participants transferred affect consistent with their nominated SO when the target person was experimentally manipulated to resemble that SO. Second, Andersen, Glassman, Chen and Cole (1995) sought to further explore the role of accessibility in transference, which following Higgins and colleagues (e.g., Higgins & King, 1981), they understood as the readiness to use, or *activation potential*, of different types of stored information. In two studies they thus tested for ‘false positive’ recognition of SO characteristics in a target person while experimentally manipulating the delay between the SO characteristic listing task and target characteristic recognition task. In both studies data suggested pervasiveness of transference effects, which Andersen and colleagues interpreted as evidence for the “chronic accessibility” of SO representations. More critically for our purposes, both the Andersen and Baum paper and the Andersen and colleagues paper advanced the methodology used for investigating transference. For example, both papers introduced a control

condition whereby another participant's SO characteristics were used for target learning and in the resemblance task. This ruled out the alternative explanation that all SO characteristics are in some way special regardless of who's SO those characteristics belong to. As another example, both papers also introduced a two week delay between SO characteristic listing and the learning and recognition tasks. The rationale here was that a two week delay between experimental sessions should be sufficient to rule out the straight forward priming effects of listing the SO characteristics in the first place. Indeed, both these innovations became part of what was to become a standardised methodology for studying transference. In fact, that methodology would become just as defining for transference research as the theoretical perspective that it supported, both of which we will introduce presently.

Launching a paradigm

In a 1996 paper Andersen and Glassman laid out what amounts to a formal statement of the *social cognitive model of transference*. They also, in that same paper, proposed a standard methodology for demonstrating and investigating the transference phenomenon. Both these contributions would prove to be influential to the social psychology of transference. So influential, in fact, that it is fair to say that the theoretical perspective and empirical approach contained in Andersen and Glassmen's paper quickly became established as the paradigm for transference research. As will become apparent later in this chapter, it is no exaggeration to say that all social psychological research into transference up to this draws very heavily from this early effort.

The social cognitive model of transference

The formal social cognitive model of transference itself draws heavily on the prior work of Andersen and colleagues introduced above. In terms of theory, it does not differ dramatically from that which was present in that earliest social psychological research. First and foremost, the defining outcome of transference is maintained as the perception that a newly encountered person possesses characteristics or qualities that are not actually present in that person, but rather are the characteristics or qualities of a SO of that perceiver. Further, to a large extent the cognitive process theorised to underpin transference closely resembles earlier reasoning, and can still be adequately captured in a concise statement: Transference occurs via the application of a cognitive representation of a SO that is stored in memory to the impression of a newly encountered person, which is cued by the observed similarity between that newly encountered person and the SO.

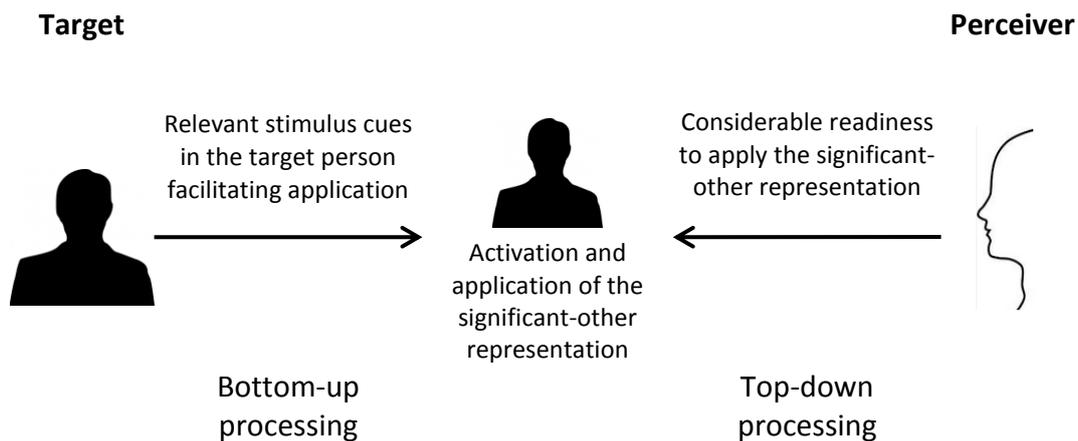


Figure 2.1. The social cognitive model of transference in its first schematic depiction (Andersen & Glassman, 1996, p. 265).

In Figure 2.1 we have reconstructed Andersen and Glassman's own depiction of the key elements of the social cognitive model of transference. The authors describe this transference model as in line with Bruner's (1957) landmark description of perceptual processes. Transference is described as "going beyond the information given", where the perceiver is "filling in the blanks" (1996, p. 266) about a newly encountered target person by drawing upon a SO representation. In terms of more specific parallels with other social perceptual models, the social cognitive model is described as akin to Fiske and colleagues' *schema triggered affect model* (Fiske & Pavelchak, 1986). This is a social cognitive model of social categorisation where stored category content, specifically a category's evaluative tone, is activated and then cognitively linked to a target person. The authors suggest that this process of activation and linking is the basic process that underlies transference.

The social cognitive model also draws on social cognitive notions of construct accessibility. In fact, the notion of a high, or chronic, accessibility (Bargh, Lombardi, & Higgins, 1988) is retained as a permanent part of the social cognitive model. In Figure 2.1, for instance, the top down processing includes "considerable readiness to apply the SO representation". This, as we have seen, follows from their earliest theorising on the nature of transference. Here too the authors argue that due to the familiarity of SOs, the frequent relevance of SOs to our lives, and the importance of SOs to us, transference includes a chronic accessibility component. This argued chronic accessibility component of transference is one of two key features establishing the social cognitive model of transference as a *distinct cognitive process* (see also Chen et al., 1999). By this we mean that it positions the social cognitive model of transference as something other than just a mirror of

other models of social perception already present in the field. Without such unique components the model would be necessarily redundant; equivalent apart from differences in the source of information (i.e., a SO) and the key stimulus (i.e., a newly encountered person).

The second distinctive feature of the social cognitive model of transference is based on the concept of “n-of-one” representations. Andersen and Glassman argue that SO representations are special in that they are stored as *exemplars*. These exemplars, or n-of-one representations, correspond to the collection of knowledge *about a single person only*. For them this can be contrasted with the storage and use of social categories (see also Andersen & Baum, 1994; Andersen et al., 1995), where social categories encompass multiple individuals. This positions the social cognitive model firmly in contrast to categorisation models such as the schema triggered affect model, and here they draw on Higgins and King’s distinction between categories and “proper constructs” (1981). They also see precedent for this line of reasoning in the exemplar based processing literature (Smith & Zarate, 1990, 1992; see also Fiske & Neuberg, 1990), although the expectation that individual people correspond to cognitive exemplars is not generally a presumption of exemplar models. An exemplar based approach does, however, resolve a logical problem for Andersen and Glassman. For them an inclusive social category approach, where the SO and target would come to share a social category, would imply that “one identifies the [target] *as being* the significant other” (1996, p. 271, emphasis in original). As transference does not entail confusion of the target’s identity, a social categorisation approach is considered to be an ill fit. Instead, the phenomenon of transference is said to necessitate a model that allows for the use of SO information in social perception

in a way that does not imply that other stimuli are subsumed within a *SO category*. Hence the appropriateness of an exemplar based mechanism; one that does not rely on categorisation, but instead on the similarity based activation and application of discrete *SO* representations. In sum, it is for these two reasons that a unique n-of-one representation approach is required, even if in all other respects these theorised cognitive structures are expected to “exist and operate as do other social constructs” (e.g., classes of people, social roles, trait groupings) (1996, p. 171; see also Hinkly & Andersen, 1996).

At this point we have covered the key components of the social cognitive model of transference. It is this model that has provided the theoretical foundation for the extensive body of transference research that has followed. While we will provide a snapshot of that research in the remainder of this chapter, it is first worth noting that this social cognitive model has received twenty years of academic attention largely without attempts at revision or modification. Although there have been theoretical extensions (most substantively the ‘relational self’; see this chapter, below) the model itself enjoys wide spread and continued acceptance in its original form (e.g., Andersen & Berenson, 2001; Andersen & Przybylinski, 2012; Baum & Andersen, 1999; Berk & Andersen, 2000). The one addition to the model, if it can be called that, has been to make explicit parallels between the social cognitive model of transference and an *if-then relations* perspective on social cognition (Andersen & Berk, 1998). Specifically, it has been argued that the notion of stable “if-then” associations, of the kind that Mischel and Schoda (1995) posit in their cognitive-affective theory of personality, is an appropriate way to understand the cue and response components in the social cognitive model. That is, a person’s cognitive system can be thought of as comprised of if-then units, where each ‘if’ is a

cueing condition and each 'then' is a linked behavioural or affective response.

Thus, in the context of transference, the 'if' is some perceived similarity between a SO and a newly encountered person and the 'then' is the consequent transference, or the application of SO information to an impression of that person. This analogy, maintained consistently in the transference literature (Andersen & Chen, 2002; Andersen & Przybylinski, 2012; Andersen & Saribay, 2005), provides further clarity as to what type of cognitive process the social cognitive model of transference is attempting to capture.

A methodological framework

Andersen and Glassman rightly devoted a sizeable portion of their 1996 paper to the experimental method that they developed for demonstrating transference effects. Not only was that experimental method an innovative solution to a challenging methodological problem, but that method would also underpin later transference research at least as much as their theoretical analysis. Although we have already seen how this challenge was overcome - the methodological solution in the 1996 paper does not differ meaningfully from that which had been developed first for Andersen and Baum's (1994) study - for the sake of emphasis and clarity it is well worth taking the time to spell it out here.

The methodological challenge we refer to stemmed from two competing needs: first, the need to recognise the uniqueness of each person's SOs, and second, the need for consistent methodologies across participants. Non-conscious cognitive processes, of the kind transference is theorised to be, are easily affected by the extraneous factors in the research environment. Investigating non-conscious processes consequently requires the use of very subtle research methods, often administered across large numbers of participants. At the same

time, we all have SOs that are very different from the SOs of other people. This is a problem if an experimenter wishes to involve SOs as stimuli in experimental conditions aimed at investigating processes considered to be more or less universal. While an experimenter may expect reasonably uniform responses when providing stimuli pertaining to gender, race, class, etc. (but see Haslam, Turner, Oakes, McGarty, & Reynolds, 1997), there is no general account of SOs that can be expected to capture the manner in which each SO is important to a wide range of participants. In sum, how one might investigate the universal effect that SOs have on social perception is not obvious.

Andersen and Glassman's solution was a variation on Higgins and colleagues' methodological approach to *self discrepancy theory* (Higgins, 1987, for review). This approach was described by Andersen and Glassman as an *idiographic-nomothetic design*. Idiographic, because it allows participants to generate personalised descriptions of SOs that they themselves nominate, and nomothetic because these personalised descriptions are used to generate experimental stimuli that are, from a particular perspective, consistent across participants. Two experimental sessions are used to achieve this simultaneously idiographic and nomethetic design. In the first session participants are asked to describe a SO of theirs. Participants are asked to nominate a SO (e.g., "[Think of a person] who is very important to you and has been for many years"; Andersen et al., 1995, p. 46), and then descriptors, or SO characteristics, are obtained by asking participants to complete a series of sentences about that nominated SO (e.g., My significant other is...). In this session participants are also asked to nominate characteristics that are irrelevant to their SO from an additional list of adjectives. These irrelevant characteristics are used as distractor items in the second session.

After two weeks participants are introduced to the second experimental session, however, the connection between the first and second sessions is not revealed to participants. Here they are informed that they will be learning about a new person and completing a memory task. In practise this second session has been presented to participants as an 'impression formation study' and they are told that researchers are interested in the way people form impressions. For the sake of credibility and maintaining the interest of participants the learning task is often described as pertaining to a person that they will *actually be meeting*. For example, in a number of studies participants were told that they will be meeting a new person who has been performing a similar task in the next room (e.g., Andersen & Baum, 1994; Andersen et al., 1996; Baum & Andersen, 1999; Berenson & Andersen, 2006; Kruglanski & Pierro, 2008).

In the task itself participants are asked to remember a series of descriptors of the new person and are told that their memory will be tested in a recognition test. Unbeknownst to participants they are split into 'resemblance' and 'no resemblance' experimental conditions. In the resemblance condition some of the descriptors of the new person are drawn from that participant's own self-generated list of SO descriptors. That new person therefore resembles that participant's SO to some degree. In the no resemblance condition some descriptors of the new person are instead drawn from a different participant's SO descriptors. Andersen and Glassman called this 'yoking' and the result is that pairs of participants across experimental conditions are exposed to the same SO characteristics in the learning phase. The purpose of this yoking is to ensure that any differences between the experimental and control conditions are attributable to the specific relationship between the participant and characteristics from *their*

own SO, rather than the inclusion of more or less SO characteristics generally. If yoking did not occur, and instead non-SO descriptors were included in place of SO descriptors in the no resemblance condition, then it would not be possible to argue confidently that what is being observed is transference; the alternative explanation would remain that participants are merely leveraging expectations about the characteristics of SOs in general.

In the subsequent recognition test participants are asked to declare whether a series of items were or were not present in the list of new person descriptors. In this test items from that participant's own SO descriptions that were not present in the list of new person descriptors are included. Transference is most commonly measured by the number of false positives for these SO items. That is, the number of SO items that were *not present* in the list of new person descriptors but are mistakenly declared as having been *present*.

Andersen and Glassman provide a tabulated summary of their suggested experimental design and we have reproduced that table here verbatim (see Table 2.1.). This table does not include mention of the experimental control condition (i.e., the yoking procedure), but otherwise is a good summary of the key components of the methodology.

Table 2.1.

Andersen and Glassman's suggested methodology for experimentally demonstrating transference (1996, p. 287)

Phase 1: Idiographic stimulus procedures

1. Subjects name a significant other (and possibly other people or categories).
2. Subjects complete a series of sentences (usually 14) to characterise the person, and then rank-order these listed sentences in terms of how descriptive they are of the person.
3. Subjects select from a list of adjectives those that are neither descriptive nor counter descriptive of the person (i.e., those that are essentially irrelevant to the person).

Phase 2: Learning about a new person and completing a recognition-memory test.

1. Subjects participate in a learning task in which they learn about one or more new target persons.
2. In the learning task, the target person (or one of the target persons) is characterised by some of the descriptive statements subjects listed earlier to describe their significant other, as well as by some irrelevant filler statements.
3. After completing a brief distractor task to clear short-term memory, subjects rate their confidence that they actually saw and learned of each of a series of descriptive statements about the target person. The

descriptive statements include those that were actually learned about the target and those that were not actually learned.

Representation-consistent biased memory is indexed by relatively high confidence ratings about statements that were *not* actually presented about the target person but that *do* describe the representation. This reflects the activation and application of the representation via the tendency to “fill in the blanks” (Bruner, 1957) about the new person.

The content of transference

We begin this chapter section by stepping back momentarily in the chronology of transference research. This is because the first investigations into the content of transference came before the social cognitive model of transference was formally articulated. Andersen and Baum (1994) investigated the possibility that, in addition to SO characteristics, the *affect* that is associated with SOs can also become part of the impression of a newly encountered target. As briefly described above, those researchers augmented the basic transference methodological paradigm by asking participants to nominate a positive and a negative SO. They were able to show that resemblance to positively regarded SOs led to more liking of the target person in comparison to targets resembling another participant’s positively regarded SO, while resemblance to negatively regarded SOs led to less liking of the target person in comparison to targets resembling another participant’s negatively regarded SO. They also detected effects on their measure of depressed affect; subjects reported feeling better in relation to targets when those targets resembled their own positively regarded SO as opposed to another participant’s positively regarded SO.

These findings were then extended by Andersen, Reznik, and Manzella (1996) in two ways. First, they altered the methodology to ensure that target persons were described using an equal number of positive and negative descriptors. This helped rule out the alternative explanation that the specific SO characteristics, rather than the overall affective tone of the SO representation, were driving differences in affective response. Second, they added a physiological measure of affective response. Specifically, they asked independent judges to assess the facial expressions of participants that were recorded while those participants read aloud characteristics of the newly encountered target during the learning phase of the experiment³. It was found that facial expressions during learning corresponded to the overall tone of the SO, where resemblance to a negatively toned SO resulted in observed negative facial affect and resemblance to a positively toned SO resulted in observed positive facial affect. Such differences were not observed in yoked control conditions.

Andersen and colleagues, by now armed with the theorising of Andersen and Glassman (1996), also added measures of interpersonal motivations and expectancies. They anticipated that during transference, stored motivations to approach or avoid (i.e., to become emotionally close or not) would become activated and applied to a newly encountered target, as well as stored rejection or acceptance expectancies. They indeed found that, in contrast to a negatively toned SO, when a target resembled a positively toned SO who was “someone in whose presence you feel happy and great about yourself, and someone you *want to be close to*, want to share your feelings with, and do not want to distance yourself from” (1996, p. 1112, emphasis in original), participants indicated to a greater degree that they would approach and be more emotionally open with the target,

and that they would expect to be liked by that target. These differences did not emerge in the yoked control condition where targets resembled the positively and negatively toned SOs of other participants.

These empirical results are part of the development of the theory of the relational self, which we will discuss in detail shortly. Here we see that, consistent with theorising elsewhere (Ogilvie & Ashmore, 1991), transference researchers turned toward the possibility that a wide variety of content, including self-relevant information such as the relationship between the SO and the self, may be stored alongside SO representations. This SO-to-self connection was also the research focus of Hinkley and Andersen (1996). They similarly suggested that SO representations would be linked in memory to particular patterns of interaction with the perceiver. They described these patterns of interaction as a part of the self, suggesting that a “self-when-with-the-SO” schema may become activated during transference (see also Deaux, 1991; Ogilvie & Ashmore, 1991). The activation of this schema would manifest in changes to the *working self-concept*, which is said to be the currently accessible and operative aspects of self (Markus & Wurf, 1987). An illustrative example they provide is of a person whose relationship with their SO results in feelings of their own incompetence. The theory here is that if that SO representation is activated in transference then those feelings of incompetence will also become activated, due to their linked status in memory; the result being an operative self-concept along the lines of ‘I am an incompetent person’.

In order to test these ideas Hinkley and Andersen augmented the standard transference methodological approach by asking participants to visualise what they are like in the presence of nominated SOs and then write down a

corresponding description of themselves. The researchers used this information, as well as baseline measures of global self-esteem, to look for changes in the self-concept across the two experimental sessions. In terms of self-description, the critical finding was that, when once again asked to describe themselves after encountering a target person, in resemblance conditions participants' session two self-descriptions overlapped more with their corresponding session one self-descriptions than in the yoked control conditions. In terms of self-esteem, although no reliable differences were found on the global self-esteem measures, by measuring the particular tone of overlapping self-description items it was possible to observe reliable changes in the overall tone of that self-description. Specifically, it was observed that in the resemblance condition the tone of overlapping self-description items were more matching to the overall tone of the corresponding SO, again comparing with the yoked control conditions. Both these findings were taken as strong evidence that transference not only results in shifts in the perception of a newly encountered person, but also in shifts in the working self-concept in a direction corresponding to the self-when-with-the-SO schema.

There were two unpredicted findings in this research that are worth mentioning. First, Hinkley and Andersen observed that encountering a positively toned target, whether resembling their SO or another participant's SO, led to a descriptive shift toward a working self-concept similar to that associated with a positively toned SO. Second, they observed that when a target resembled participants' own negatively toned SOs those participants came to perceive descriptors unrelated to that SO but descriptive of their present self-concept to be more positive. Both these effects were interpreted as pointing to additional social-cognitive processes running parallel to transference. The former was argued to

represent the potential for affect to directly cue various self-schema and thus alter the working self-concept. The latter was interpreted as a kind of “self bolstering” where participants took the opportunity to emphasise the positivity of other aspects of themselves in the face of negative self-concept change. This line of thinking was given further attention by Baum and Andersen (1999) who were also interested in how the content of transference may lead to other psychological responses. They investigated the interaction between transference and ‘role expectations’, which are the expected behaviours of the self and another person in interpersonal interactions, as well as the goals to be pursued with that other person (e.g., Baldwin & Sinclair, 1996; Downey & Feldman, 1996). Specifically, they theorised that transferred content could include role expectations and that the interaction between these role expectations and the actual interpersonal interaction would impact mood. When transference is from a positively regarded SO and those role expectations are met the researchers predicted a positive mood response. However, when transference is from a positively regarded SO and those role expectations are not met they predicted a negative mood response. This prediction was supported in their study where they manipulated interpersonal role congruence between the SO and the newly encountered target in addition to the standard resemblance manipulation.

In terms of the trajectory of transference research, both this study and Hinkley and Andersen’s research represent early empirical linkages between transference and other concurrent but distinct self and social perceptual processes. This new emphasis will be covered in the next chapter section. Before that though, we will turn our attention to three more examples of the study of transference content, all of which turned transference back toward the clinical

space. Berenson and Andersen (2006) investigated the possibility that when a SO has been abusive, then transference may include that history of abuse and lead people to be, *inter alia*, more wary and disliking of a newly encountered target, as well as more expecting of rejection from that target. They did this by asking participants who had been abused by a parent to nominate that parent as their SO in session one of their study, to be compared with a control group of non-abused participants. A manipulation of threat in session two was also included in the study design; it was anticipated that differences between transferred content from an abusive SO and transferred content from a non-abusive SO would be more apparent when a newly encountered target was described as “getting increasingly tense and irritable” (p. 1513), thus cueing particular aspects of the abusive SO relationship. Results largely supported the theorising, although with some unanticipated results. Straightforwardly, transference led abused participants to expect rejection more, as well as to be more mistrustful, indifferent, and disliking, than non-abused participants. Somewhat counter to expectations, the threat manipulation led to more disliking when the target resembled a non-abusive SO but did not alter disliking when the target resembled an abusive SO. This was interpreted as a ceiling effect, where abused participants already exhibited heightened dislike of the newly encountered target.

Brumbaugh and Fraley (2006) connected transference with styles of interpersonal attachment (e.g., Bowlby, 1969). They theorised that transference may be a key mechanism by which patterns of attachment permeate across an individual’s interpersonal relationships. Thus, in their study they extended the standard transference methodology by asking participants to complete measures of attachment-related anxiety and attachment-related avoidance in the context of a

former romantic partner and their relationship with that partner. In session two participants were presented with two personal ads; one that resembled their nominated SO and one that resembled another participant's SO. As the critical DV participants were asked to again complete attachment-related anxiety and attachment-related avoidance measures, but this time in the context of imagining their relationship with the potential dating partners presented to them. Results indicated that, while attachment patterns impacted the perception of the two targets generally, resemblance with a SO led to increased correspondence between past attachment-related thoughts and feelings and anticipated attachment-related thoughts and feelings. This was taken as evidence for transference playing a role in the classic clinical phenomenon whereby patients recreate the interpersonal dynamics of past relationships in present relationships.

Continuing the interest in the relationship between transference and interpersonal attachment, Berk and Andersen (2008) similarly proposed that interpersonal goals that are connected with SOs may be stored in memory alongside our representations of those SOs. They theorised that whether that goal has been satisfied or not may also be stored alongside SO representations, and consequently goal satisfaction or dissatisfaction may be part of transferred content. The authors were able to obtain empirical support for their theorising. In their study participants whose relationship with their SO was characterised by chronic dissatisfaction of affection goals displayed reduced motivation to engage with a newly encountered target who resembled their SO. They also displayed increased hostility and reduced persistence on a task designed to solicit liking from the new person.

Looking back toward the clinical space is a reoccurring theme in the social psychology of transference. Indeed, in addition to the above two empirical papers, which link transference to topics traditionally considered to be clinical in nature (i.e., parental abuse outcomes and interpersonal attachment patterns respectively), there are a number of theoretical papers that discuss more broadly the possible implications of social psychological transference research for clinical assessment and treatment. Andersen and Berk (1998), for example, speak at length to this topic. In their paper they reposition the social psychological research that had been conducted up to that point for a clinical audience; their aim being to use the research findings around the process and content of transference to help clinicians anticipate when transference will occur and what implications transference may have for a patient. Further, they propose methods for “dealing” with transference. These draw upon notions of mindfulness and self-monitoring (e.g., Mahoney & Thorenson, 1974), where the basic premise is that once maladaptive transference processes are known to the perceiver then opportunity exists to overcome or halt those processes; the result being improved outcomes for the patient, or in Andersen and Berk’s language, “as the client's reactions become less transferenceal and more piecemeal, the maladaptive content of the schema should slowly change in the direction of new, presumably less maladaptive experiences” (1998, p. 94). These sentiments have been echoed more recently by Andersen and Przybylinski (2012), although they do pour cold water on any notion that interrupting transference once it is identified will be straight forward. Their more reserved position is based on further research reported to indicate that even once a perceiver is consciously aware of transference, and is motivated to stop transference from occurring, the process may still run its course (Liviatan &

Andersen, 2008, February; Przybylinski & Andersen, 2011, May). Still though, Andersen and Prsybylinski remain optimistic that with time and guidance from a therapist transference can be controlled, even if some level of finesse is required on the part of that therapist.

The relational self

A theory of the relational self was proposed by Andersen and Chen (2002) as a natural extension of the social psychology of transference. According to the authors the ambition was to extend the literature “by proposing a theory that articulates how various manifestations of the self and, more broadly, personality can emerge in interpersonal contexts when transference is elicited” (p. 619). Their theory was expressed in five propositions (Table 2.2), although the brevity of those propositions does mean that the substance of the theory is really in the fine print. In that fine print, however, a reader would be forgiven for coming away with the impression that the newer theory is largely a rebranding of that earlier social cognitive model of transference. This is because this theory of the relational self follows the model of transference introduced above very closely. Shared features include the storage of SO representations containing idiographic knowledge in memory (i.e., n-of-one representations), the particular psychological prominence of those SO representations (i.e., chronic accessibility), the cueing and use of those SO representations in social perception (i.e., transference), as well as a social-cognitive framework inspired by schema-activation research (i.e., if-then relations).

Table 2.2.

The five propositions of Andersen and Chen's "interpersonal social-cognitive theory of the self and personality, the relational self", (2002, p. 619)

-
1. Relational selves are a product of the profound importance of the significant other.
 2. Relational selves emerge in the context of transference
 3. Relational selves have both idiographic and socially shared elements.
 4. Relational selves provide a basis for an interactionist model of personality
 5. Relational selves are cognitive-affective units in an if-then model of personality
-

So what then are the novel aspects of Andersen and Chen's theory of the relational self? In attempting to answer this question the instinctive move is to look to the 'relational self' construct. Relational selves are described in the theory as the connections in memory between SO representations and particular self-representations (Figure 2.2). These representations are characterised by relational content that is informed by the corresponding interpersonal history. As we have seen, however, aspects of self-to-SO relationships were proposed to exist as cognitive representations since well before the inception of the social cognitive model of transference (Ogilvie & Ashmore, 1991). Indeed, we have reviewed the early empirical work related to the proposal that SO cognitive representations and the associated relational content may be transferred to newly encountered people (Hinkley & Andersen, 1996). This makes the relational self construct a problematic point at which to establish the novelty of this theory of the relational self. At most

we can say that the relational self achieves a shift in emphasis toward a particular type of transferable content: relational content that could also be viewed through the lens of the social cognitive model of transference.

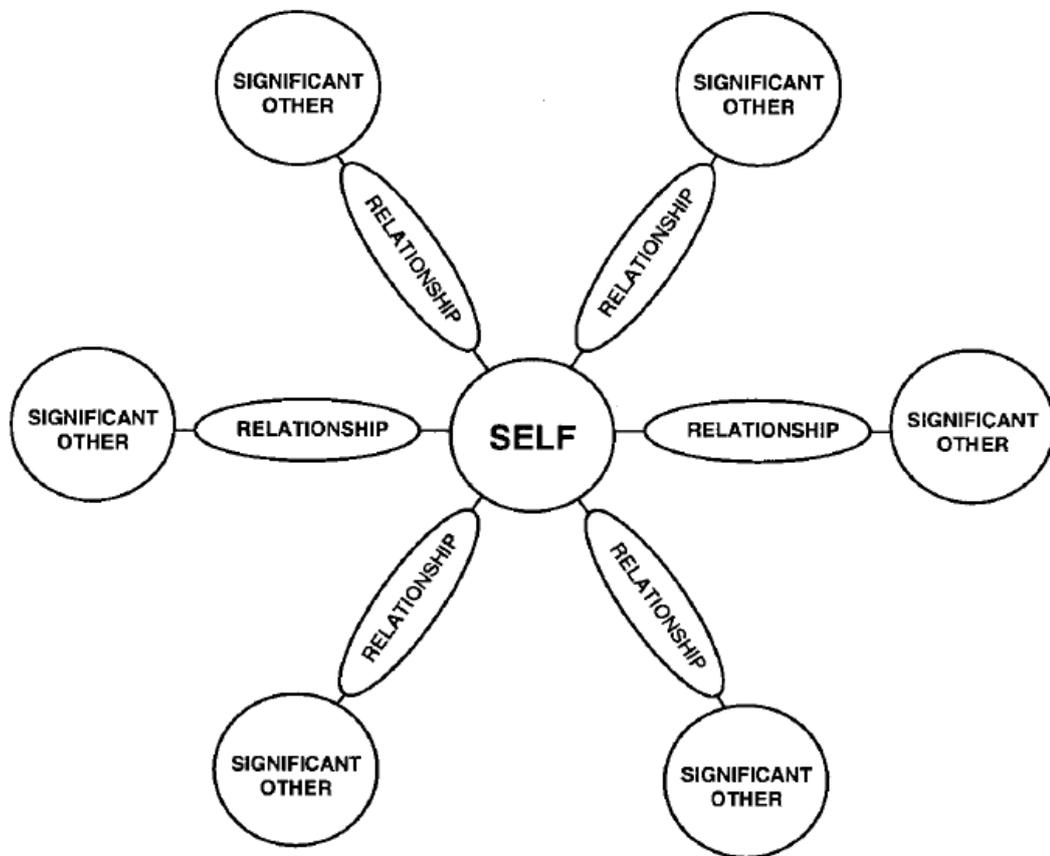


Figure 2.2. Andersen and Chen’s (2002) depiction of linkages between the self and significant-other representations in memory (p. 621). They describe individuals as possessing a “repertoire of relational selves” (p. 619).

Where else then might we look for the novelty of this new theory? There are two explicit claims in this regard; one seemly robust and one seemingly questionable. Turning first to the more questionable of the two, the authors argue that a novel aspect of their theory is that the content of relational selves may

include not just idiographic elements unique to the SO-to-self relationship, but also 'socially shared elements' that are cognitively linked to that SO representation:

The present theory continues to recognise the idiographic elements of significant others and relational selves but goes further by positing that when an idiographic significant-other representation is activated, this in turn activates not only idiographic self-with-significant other knowledge but also generic, socially shared constructs, such as social categories or social identities, that are linked to the significant other. (Andersen & Chen, 2002, p. 264)

The empirical example is given of the finding that gender information can become salient in response to the cueing of SO representations (Karylowski, Konarzewski, & Motes, 2000). Really though, the inclusion of nomothetic content in transference was never something that was precluded in the social cognitive model of transference. Quite the opposite in fact: transference of nomothetic content was argued to have already been demonstrated (Andersen & Glassman, 1996). Why the discrepancy in interpretation? What appears to have happened here is that the novel methodological approach of the social psychology of transference, the idiographic-nomothetic design, has been misremembered as a *theoretical component* of the social cognitive model of transference. In other words, and not for the first time in social psychology (Haslam, Ellemers, Reicher, Reynolds, & Schmitt, 2010; Turner, 1981), the empirical has been conflated with the theoretical, leading researchers to forget the capacity of the social cognitive model of transference to cope with socially shared constructs of the kind described by Andersen and Cole; hence our assessment that this particular claim toward novelty is on shaky ground.

Really, the sole novel aspect of this theory of the relational self is the second, more ambitious, expansion. This is to make relational selves a key basis for interactionist personality (see propositions four and five), where personality is a function of person \times situation interactions (e.g., Carson, 1969; Endler, 1984; Magnusson, 1990; Mischel, 1973; Parvin & Lewis, 1978). The authors achieve this by further drawing on the work of Mischel and Shoda (1995). In addition to the use of if-then relations to understand the cognitive process underlying transference, here the authors adopt fully the *cognitive-affective system theory* of personality, where personality is understood as a person's unique constellation of if-then responses to situational stimuli. They argue that relational selves are a special case of a person's personality, owing to the rich and important nature of the particular if-then relations that correspond to our SOs. In terms of richness, the authors again mention the inclusion of both idiographic and nomothetic content, but also detail a number of motivational processes and interpersonal goals that they argue are stored in memory as mental constructs and are included as part of our relational selves. They emphasise in particular the need for human connection (e.g., belongingness; Baumeister & Leary, 1995), but also anticipate that needs for autonomy, competence, meaning, and felt security will form part of our relational selves. In terms of importance, the authors point back to the chronic accessibility of SO representations as reason to anticipate that relational selves will be a particularly strong influence on peoples' response patterns; or in the nomenclature of the article, people's personality.

In sum then, the critical contribution of the theory of the relational self is to advance transference and self-when-with-the-significant-other representations as a driver of personality. This particular source of personality is then positioned

between other established sources of personality and self-concept. Specifically, this relational self is situated at an intermediate level of inclusiveness between the personal self, which is described as the self as an independent and autonomous entity, and social identities, which are described as the self as experienced through group memberships. This 'level of inclusiveness' perspective is argued to serve as an integration of otherwise disparate theoretical attitudes toward the self (see also Andersen, Reznik, & Chen, 1997) allowing for a more complete picture of self-processes. Additionally, this theory of the relational self and the associated efforts toward integration are viewed by the authors as complementary to other three level conceptions of the self. That is, those that conceptualise the self concept as comprised of relational selves among *personal selves* and *collective selves* (Brewer & Gardner, 1996; Sedikides & Gaertner, 2001).

While there have been a number of empirical studies conducted under the banner of this theory of the relational self, in the present context the work of Saribay and Andersen (2007) is particularly notable. This is because their research is closely tied to the particulars of this relational self theory and cannot just as easily be thought of as an investigation of the social cognitive model of transference⁴. They theorised that, because the relational self and collective self-structures are closely related, during transference collective identity relevant content, such as ethnicity, may come to be applied to a newly encountered target person. That content can subsequently cue social identification with that collective identity for the perceiver; this outcome being expected only on occasions when the SO is of the same ethnic category as the perceiver. Data across two studies, both using variations of the traditional transference methodology, followed this expected pattern; the salience of a perceiver's ethnic identity, as measured by

ingroup favouritism, was increased when a target person was made to resemble a SO who shared that ethnic category membership. This effect was moderated by the level of ethnic diversity in the SOs social network, which was expected to inhibit ethnic identity salience. This empirical research, which connected the relational self with notions of collective selves, social identification, and ingroup favouritism, helps make clear the positioning of the relational self as a fundamental self-structure that is on par with other established sources of self-conception studied in social psychology.

Connecting transference with other psychological processes

We have already seen a number of examples where transference has been linked to other psychological processes. Processes relating to interpersonal motivation have been argued to guide the content of transference (Andersen et al., 1996; Berk & Andersen, 2008), and the transference process has been suggested as one of the mechanisms underlying the influence of interpersonal dispositions across multiple relationships (Berenson & Andersen, 2006; Brumbaugh & Fraley, 2006). It has also been suggested that the content of transference may cue defence mechanisms and efforts to maintain a positive sense of self (Hinkley & Andersen, 1996). In all these cases, however, the focus has remained, in one way or another, on the content of transference. Here, in contrast, we will make mention of a handful of research examples that have been concerned first and foremost with the relationship between transference and other psychological processes largely irrespective of content, beginning with the relationship between transference and mental resources.

Kruglanski and Pierro (2008), drawing on the social cognitive notions of the cognitive miser and the motivated tactician (Fiske & Taylor, 1984, 1991; see

Chapter 4), reasoned that transference would be relied upon less in impression formation when perceivers have the cognitive resources and motivation to go beyond heuristic processing of social stimuli. This is an extension of Andersen and Glassman's analogy between transference and other schema based social perception processes. Here the authors draw upon the view that *top down* social perception strategies such as schema activation and the use of social categories can be contrasted with a data driven, *bottom up*, process of individuation (e.g., Brewer, 1988; Fiske & Neuberg, 1990). Or in the language of the authors,

[If] transference reflects the misapplication of an activated significant-other schema to a newly encountered individual, and if an activated schema is more likely to be misapplied in the absence, rather than the presence, of processing resources, then more pronounced transference effects should be observed under conditions of [reduced processing resources]. (Kruglanski & Pierro, 2008, p. 297)

Processing resources was operationalised by varying between subjects whether data collection occurred during 'circadian match' or 'circadian mismatch'. This was achieved by first surveying participants to determine their level of 'morningness' (i.e., the extent to which morning activity is preferred over evening activity). In the circadian match condition data collection was conducted in the morning for those high in morningness and in the evening for those low in morningness. In the circadian mismatch condition the pattern was reversed. In all other ways the study resembled the standard transference research methodology. Results supported predictions; transference was only observed in the circadian match condition, supporting the theorised role of mental resource scarcity in moderating the transference effect.

Similar research comes from Pierro and Kruglanski (2008) who were also seeking to identify potential moderators of transference. On this occasion the moderator of interest 'need for cognitive closure' (NfCC; Kruglanski, 2004; Kruglanski, Pierro, Mannetti, & De Grada, 2006; Kruglanski & Webster, 1996), which is often, but not always, approached as an individual difference variable. The key prediction across the two reported studies was that those who are higher in dispositional NfCC will rely more on transference as a tool for forming impressions of others. The basis for this being that those who are high in NfCC are anticipated to be more motivated to complete their impression formation processes and are therefore more reliant on the accessible cognitive schemas in impression formation. Or put conversely, those with lower NfCC are anticipated to have greater motivation to reserve judgement and instead individuate the target, basing their perception instead on further scrutiny and detail. The results of both studies supported this prediction. NfCC moderated in the expected direction the extent of transference from a SO to a newly encountered person (Study 1) and from a past leader to a newly encountered person placed in a leadership position (Study 2). This was again interpreted as support for a social cognition approach to transference, where social perception is based on either top-down or bottom-up processes and the choice of process is determined by the motivations and cognitive resources of perceivers. It was also noted that such a view on transference differs dramatically from the traditional psychodynamic perspective, where transference is described as an outcome of highly motivated processing relating to unmet psychosexual or developmental needs (see also Kruglanski & Pierro, 2008).

A third example of research of this type, concerned foremost with transference in relation to other cognitive process, investigated the potential role

of social categories as barriers to transference. Kraus, Chen, Lee and Straus (2010) investigated whether social category memberships may interrupt the transference of content from a SO to newly encountered people. More specifically, they theorised that, owing to the inferential power of transference and the emotional significance of SOs, transference would be able to overcome social category incongruities between a SO and a target that would otherwise undermine the perceptions of similarity that are required to cue transference. In two studies the standard similarity manipulation was crossed with a manipulation of social category membership. In that second manipulation the newly encountered person was either described as sharing or not sharing political affiliation (Study 1) or ethnicity (Study 2) with the participant's SO. Results supported the authors predictions. Transference, operationalised via both inference and evaluation, was observed regardless of whether the SO and target shared the manipulated social category⁵. In the second study transference was also shown to result in behavioural changes whereby participants chose to sit closer to a person resembling their SO, as well as interrupt the role of collective self-esteem (Luhtanen & Crocker, 1992) in determining the evaluations of ingroup and outgroup members. The latter effect was interpreted by the authors as an indication that transference could serve as a tool for managing intergroup relations, where activating transference reduces out-group bias against outgroup members.

Summary

In the course of this chapter we have reviewed transference's time as a social psychological research topic. We now have a sound understanding of much of the social psychology of transference, which includes an understanding of the

psychodynamic genesis of transference as a psychological topic, an understanding of the emergence of early social psychological interest in the phenomenon, as well as an understanding of the concerted development of a more specific theoretical and methodological approach to transference in social psychology. Finally, we have seen the continued interest in transference in social psychology. Together this provides us with sure footing from which in the following chapter we can identify some of the critical unanswered questions that can be derived from the above content.

Before launching into that next step, however, there are two interim conclusions that can be made. First, researchers clearly believe that the transference phenomenon is important. We see this both in the proposed implications for transference, which span the clinical, personal, interpersonal, and intergroup domains, as well as in the sheer number of researchers devoting time and energy to this work. Second, a, if not *the*, central feature of the social psychological study of transference is the social-cognitive model of transference. Ever since its inception it is apparent that transference theorising has never strayed far from the ideas that are contained within Andersen and Glassman's 1996 paper, which are intern deeply rooted in the social cognitive tradition. It is therefore far from trivial for us to argue in the chapters to follow that our understanding of transference will be better served by an alternative to that social cognitive model, one based on the social identity approach.

Notes

1. Although Freud was generally focused on the threat that transference posed to successful therapy, he too anticipated some benefits. For example, late in his

writing Freud argued that transference from a parent to the therapist may create an avenue of influence for that therapist, albeit one that is problematic and open to abuse (Freud, 1940). Freud had also previously described transference during theory as advantageous in that it gives the therapist access to those problematic unconscious processes (e.g., Freud, 1905/2006). Elsewhere transference is described as “the vehicle of the healing process, the necessary condition for success” (Freud, 1912/1950, p. 314).

2. A correction to the results of this paper should also be noted. Andersen et al. (1995) explain that it was actually both the *SO* and *non-SO* in that study that were found to be more featurally distinct than stereotypes and traits in Study 2. This naturally weakens the evidence behind the conclusion that *SO* representations are particularly distinct, and raises further methodological questions about the comparability of the stereotype stimuli and the individual stimuli, but because the distinctiveness claim is not part of our own theorising we need not concern ourselves further with this issue.

3. See also Berk and Andersen (2000) for a further behavioural extension of the standard transference methodology.

4. The research of Berenson and Andersen (2006), for example, can be characterised in this way. That research was described as an investigation of the nature of the relational self; however, the specific research questions are more closely related to the earlier social cognitive model of transference. Hence our decision to give it coverage in the earlier sub-section of this chapter.

5. A main effect was observed in Study 1 for the social category manipulation. Ingroup members were evaluated more positively than outgroup members. This counters the potential criticism that the null results for the social category manipulation simply reflected an ineffectual operationalisation or other insensitivities in the design.

CHAPTER 3

OPPORTUNITIES FOR PROGRESS

The social cognitive model of transference has facilitated the development of a vast and fruitful body of social psychological research. It is also the case, however, that there are some limits to the extent to which the social cognitive model can advance our understanding of the transference phenomenon. Indeed, the social cognitive model of transference has inherited from the social cognition approach certain gaps, or areas where the explanation overlooks, or even rests on, substantial unknowns. Exploring three areas where greater clarity of theory is required will be the first task of the present chapter. The first of these relates to the process of similarity based cueing, where there is difficulty in understanding similarity as simply a characteristic of the stimuli we are exposed to. The second relates to the storage of SO representations, where the storage of SO representations as discrete nuggets of information in our memory is hard to reconcile with actual observations of brain architecture. Finally, the social cognitive model of transference is quiet on the specifics of impression formation. In particular, that model does not explain what SO representations are being applied to during transference.

After identifying these areas in need of further attention, we then go on to introduce the social identity approach, and more specifically certain critical tenets of SCT. In Chapter 5, these tenets will allow us to make immediate theoretical progress within each of these areas, and allow us into introduce further ideas

concerning the antecedents of transference. Indeed, that progress will be achieved while simultaneously introducing new parsimony to how transference is accounted for cognitively.

Key limitations of the social cognitive model

Shortly before the 1996 formal statement of the social cognitive model of transference Andersen and Baum suggested that “a simple similarity-based activation and application process may well be the basic mechanism underlying transference” (1994, p. 466). All in all, this remains the crux of the social cognitive model. As explained earlier, in that model the cognitive process underlying transference is described as one where similarity between a SO and a newly encountered person cues the activation of a stored SO representation, which is then applied to the impression of that newly encountered person. This explanation of transference is accessible and intuitive, and has proved to some extent sufficient in laboratory contexts, as demonstrated by its ability to predict, or at least account for, obtained results. Some complexities arise, however, when the components of this social cognitive model are subjected to closer scrutiny.

Similarity based cueing

If transference is cued by an observed similarity between a SO and a newly encountered person, how then is that similarity observed? This isn't an obvious question to ask. After all, similarity is ubiquitous to our experience; it is something that we recognise all around us, seemingly instantaneously and with the utmost of ease. This perceptual efficiency that we all appear to possess, however, masks what is actually a highly enigmatic area of human cognition. In fact, we need only probe a little to get a sense of this. Take, for example, two of the items currently in front of me: a book and a watch. Are these two things similar? They share some

features, but certainly not others. Should I consider them to be alike? There are also some sunglasses and earphones on my desk. Are they similar? They both go on my head. But they are worlds apart in a myriad of other ways. Are they instead different?

The above difficulties firstly reflect the reality that similarity does not stand on its own. Or in other words, all judgements are implicitly comparative (Tajfel, 1978b), and similarity “cannot be established without delineating difference” (Jenkins, 1996, p. 113). What’s more, and by the same token, it can be convincingly argued that similarity cannot be understood as an inherent characteristic of stimuli (e.g., Medin, 1989; Medin, Goldstone, & Gentner, 1993; Medin & Wattenmaker, 1987; G. L. Murphy & Medin, 1985). That is, appreciating similarities require acts of *comparison* and *delineation*. Similarity is thus a perceptual judgement and any question of similarity or difference cannot be answered by relying solely on the ‘objective’ characteristics of the stimuli. A useful analogy here is distance. Two points may be a specific distance away from each other, but ascertaining whether those two points are far apart or close together requires further processing of some kind (Figure 3.1). This is awkward for the social cognitive model of transference, where similarity is the key predictor of transference. Similarity, it turns out, is hard to establish as any more than a convenient label for what is frequently observed but little explicated. This is thus more than a philosophical concern; the predictive utility of the model is brought into question if the critical component of similarity cannot be given substance.



Figure 3.1. Are the two points close together or far apart? This question cannot be answered without that ‘something’ more.

SO representation storage

If transference is the application of stored SO representations, how and where then are those representations stored? The instinctive answer here is ‘in memory’, and that is essentially the answer adopted by the social cognitive model of transference. As with the case of similarity, however, the instinctive response starts to fail us under close scrutiny, with the specific challenge here concerning *neurological plausibility*.

The social cognitive model of transference paints a neat picture of SO representation storage; one where SO representations are discrete nuggets of information, placed carefully on the metaphorical storage shelves of memory, ready to be searched for and retrieved when needed. This is markedly different to what we know about where memory physically happens. That is, it is difficult to reconcile the architecture of our brains, which is not unfairly described as a fleshy mess of innumerable synapses, neurons, and neural networks, all engaged constantly in furious activity. Indeed, it is in large part for this reason that connectionist theorists argue strongly against the idea that our cognitive representations are static entities that are stored inertly until retrieved by a search

process (Conrey & Smith, 2007; Smith, 1996; Smith & DeCoster, 1998). The neurological implausibility of such accounts, termed “symbolic” in their vernacular, has prompted the search for other perspectives on human cognition in social perception. This search has yielded fruit, with an increasing quantity of more neurologically plausible models of social perceptual processes being developed (e.g., Kashima, Gurumurthy, Ouschan, Chong, & Mattingley, 2007; Van Rooy, Van Overwalle, Vanhoomissen, Labiouse, & French, 2003). The social cognitive model of transference stands in contrast to these developments.

Impression formation

If transference is the application of SO characteristics to a newly encountered person, what exactly, cognitively speaking, are those characteristics being applied to? The social cognitive model of transference is essentially silent on this point, leaving us to develop our own possible answers to this question. None of those answers, however, are particularly satisfying. This is because the nature of the social cognitive model seems to lead us toward logical dead ends in this area. To give an example, one attempt at an answer would be that SO representations are added to the cognitive representations of newly encountered target people. This, of course, raises the new question, where do those target representations come from? Here we might be tempted to say that these are also stored in memory, but at this point the line of thinking begins to fall down. It would not seem right that target representations would also be activated from memory stores, as this is the first time that we would have encountered the target. Overall, this perspective would create a strange equivalence between SO representations and target representations.

Taking a different perspective, we may be tempted to think of target representations as cognitive depictions of newly encountered people as they really are. Said otherwise, as a cognitive carbon copy of what is observed about the new people we come across. Here though, we end up with a different problem. If such carbon copy representations do exist, what would prompt the further application of a SO representation? The social cognitive model suggests similarity, but this is premised on the notion that there is some need to “fill in the blanks” or “go beyond the information given”. If carbon copy target representations are able to be readily formed, then it is unclear as to what blanks there would be that would need filling in, nor what further information would be required. In short, transference loses its apparent utility if SO representations are being applied to fully fledged perceptions of newly encountered people.

It might be countered that this theoretical challenge should be forgiven due to the fit between the model and data that has been demonstrated thus far. The ambiguity of this area of the model, however, is accompanied by practical concerns. Without a more complete model of the impression formation process involved in transference we cannot justifiably have confidence that the predictive power that we think we have won't be unexpectedly undermined. Or phrased positively, without a more complete model we cannot be sure that we aren't missing opportunities to influence transference by manipulating factors beyond SO-to-target similarity. Indeed, shortly in this thesis it will be shown that such opportunities do indeed exist. Specifically, in Chapter 5 we will demonstrate that by looking at transference through an SCT lens, not only will we be able to make some progress with regard to all three of the above challenges (i.e., the ambiguity of impression formation target, as well as the ambiguity of similarity as a predictor

of transference and the neurological implausibility of SO representation storage), but we will also be able to extend our thinking in terms of the key predictors of transference. This will be achieved by developing a more complete model of the cognitive process of impression formation than that which is presently offered in social cognitive circles.

The social identity approach

The social identity approach is a body of social psychological theory that emerged in the 1970s and 1980s, principally in the United Kingdom, but with strong influences from elsewhere in Europe (Turner & Reynolds, 2010). The social identity approach is comprised of both SIT (Tajfel & Turner, 1979) and SCT (Turner, 1985; Turner et al., 1987). The former, SIT, came first and was pioneered by Henri Tajfel, whose early work formed part of the 'new look' in social psychology (e.g., Tajfel, 1957, 1959, 1969). It is a theory of intergroup relations; it predicts certain intergroup behaviours contingent on certain key characteristics of the intergroup environment. These are, perceived group status differences, the perceived legitimacy and stability of those status differences, and the perceived ability to move from one group to another. To achieve this SIT invoked the concept of social identity, which was defined in that theory as "those aspects of an individual's self-image that derive from the social categories to which [one] perceives [oneself] as belonging" (Tajfel & Turner, 1979, p. 16).

SCT was developed subsequent to SIT and is well thought of as a cousin theory to its predecessor. Indeed, one of SCT's key aims was to flesh out the social identity concept. As such, SCT is primarily known as an account of the self-concept, as well as an exploration of various intergroup and intragroup phenomena that are naturally implicated by that account. These phenomena include social influence,

group cohesion, group polarisation, and collective action (Haslam, 2001; Turner & Reynolds, 2001). For our purposes, however, the critical feature of SCT is that in order to explain social identity the theory elucidated a novel and highly developed account of *self-categorisation*, which in turn was built upon a novel and highly developed account of social categorisation *in general* (P. M. Brown & Turner, 2002; McGarty, 1999; McGarty & Penny, 1988; Oakes, 1987, 1996; Oakes et al., 1999; Oakes, Haslam, & Turner, 1994). It is in that account of social categorisation that we find opportunities to extend our understanding of the transference phenomenon.

Social categorisation in self-categorization theory

In this chapter section we introduce SCT's social categorisation model, along with some amendments to reflect developments made since the publication of SCT's twelve assumptions and twenty two hypotheses (Turner, 1985). This introduction, however, will be necessarily limited. For further detail on SCT's account of social categorisation, and those developments, we recommend McGarty's review (1999). Indeed, here we adopt a similar structure and approach to that review: we begin with the fundamental nature of the social categorisation process, and then move on to detailing the predictors of social categorisation in *constraint relations* terms. A constraint here meaning a causal link between psychological processes that may either increase or decrease the occurrence or strength of the dependent process.

Social categorisation. SCT's most basic assertion is that *cognitive categorisation* is the key cognitive process underlying perception. Cognitive categorisation being "the process of understanding what something is by knowing what other things it is equivalent to and what other things it is different from"

(McGarty, 1999, p. 1). What is this thing? What are its boundaries? What qualities does it have? Is it a table or an aardvark? These questions can only be answered by determining whether 'the thing', whatever it is, is different from, or the same as, 'other things'. Here SCT follows the influential social psychological work of Bruner, whose unequivocal argument that "perception involves an act of categorisation" (1957, p. 123) itself follows from the long standing and well known epistemological position that "meaning is a product of a system and relation; nothing means anything on its own" (Jenkins, 1996, p. 113). Cognitive categorisation is put forth as the process that turns the buzzing confusion of our sensory experience into an environment that can be understood, predicted, and navigated.

It does not get us very far, however, to simply say that we understand sensory experience via categorisation. This logical truism might help us keep mindful of the relativism of perception, but the statement by itself has very little meat to it. It doesn't really explain how categorisation achieves what it does. Yes, stimuli must be categorised before they become meaningful, but what is the nature of the difference between the stimuli input and the information output? What are we doing cognitively when we categorise? SCT offers an answer to these questions by describing cognitive categorisation as a process of cognitive *accentuation*. Or more specifically, "accentuation of intraclass similarities and interclass differences" (Turner, 1982, p. 28).

This is an application of Tajfel's research and theorising in the field of perceptual distortion (Tajfel, 1957, 1959; Tajfel & Wilkes, 1963), conducted well before Tajfel's better known work in developing the minimal group paradigm and SIT (Tajfel, 1974, 1978a; Tajfel & Billig, 1974; Tajfel & Turner, 1979). In that

research Tajfel's accentuation principle was advanced to explain the observation that perceivers systematically overestimate or underestimate judgements. For example, it had been observed that perceivers increased their diameter estimation of circular disks labelled with a dollar sign or Nazi symbol (Bruner & Postman, 1948). Correlations were also observed between the monetary value and estimated size of cardboard cards (Dukes & Bevan Jr, 1952b), and the increased estimation of weights for jars containing valuable as opposed to not-valuable objects (Dukes & Bevan Jr, 1952a). Such changes in estimation or appraisal as a function of peripheral stimuli are sometimes referred to as contrast and assimilations effects; contrast effects being defined as "the shift in placement of a stimulus away from anchor value" and assimilation effects defined as "the shift in placement of a stimulus toward an anchor value" (Sherif & Hovland, 1961, pp. 46).

Tajfel's argument was that a range of these observed perceptual effects may be explicable as an outcome of a pre-conscious process designed to establish clarity of perception after categorisation. In other words, in order to navigate our environment, to be clear about what falls within a category and what does not, Tajfel reasoned that we accentuate the differences between stimuli belonging to different classes and accentuate the similarities between stimuli belonging to the same class. This idea was demonstrated most clearly in Tajfel and Wilkes' (1963) line length estimation experiment. There participants were randomly presented with a series of eight lines, each varying in length. The authors found that when a categorisation scheme was applied such that the four shorter lines were labelled with an 'A' and the four longer lines were labelled with a 'B' participants length estimations accentuated the difference at the divide between the two categories (see also Corneille & Judd, 1999). As predicted, accentuation was shown to provide

an “improvement on the acuity of discrimination between the stimuli of the series” (Tajfel, 1957, p. 19). It is in this sense that SCT includes accentuation as a corollary of cognitive categorisation: it is the accentuation of intraclass similarities and interclass differences that converts stimuli input into information output.

Social categorisation in SCT is a natural extension of the above. It is simply the process of understanding *who* people are by knowing what other people they are equivalent to and what other people they are different from, where this is achieved cognitively via the accentuation of the similarities between people within the same class and the accentuation of the differences between people belonging to difference classes (McGarty & Penny, 1988; McGarty & Turner, 1992).

Accentuation in social settings might also be labelled *stereotyping*, although the process described here has none of the pejorative baggage that is conjured up by that more well-known term. This is true in two senses. First, SCT does not see the process as relating specifically to negative attributions made about people (e.g., women are less good at math, African American’s are violent). In SCT social categorisation is neutral in valence; it is concerned equally with content that is negative, positive, and valence neutral. Second, SCT steers clear of the usual derision of social categorisation by turning away from the popular position that social categorisation is characterised by inaccuracy, exaggeration, and approximation (e.g., Allport, 1954; Campbell, 1956; Fiske & Neuberg, 1990; Lippmann, 1922/2007; Macrae & Bodenhausen, 2000; Operario & Fiske, 2001; Sullivan, 1953; Taylor, et al., 1978; for review see Ottati & Lee, 1995). SCT theorists instead make the opposite case that the process of social categorisation should be viewed as a pathway toward veridical perception (Oakes, 2001; Oakes et al., 1999; Oakes et al., 1994; Oakes & Reynolds, 1997; Reynolds & Oakes, 1999; Turner, et al.,

1994). We need not go into the details of that argument here (see Chapter 4 for some further detail), but some of the logic of this view should be apparent given what we have said about cognitive categorisation already. In particular, cognitive categorisation was introduced as our mechanism for moving away from buzzing confusion and toward understanding, prediction, and navigation. Cognitive categorisation thus serves as an information generation tool, rather than as a pathway toward information loss in the form of approximation and heuristic. Further, understanding cognitive categorisation as a necessary mechanism for *all perception* creates problems for any accusation that cognitive categorisation, including social categorisation and stereotyping, is a less veridical mechanism of perception (i.e., less veridical than what?). In sum, here social categorisation and stereotyping is not thought of as correlated with prejudice, which is often the case in social psychology (Dixon, Durrheim, Kerr, & Thomae, 2013), as well as elsewhere.

Although social categorisation is considered to be omnipresent in social perception according to the social identity approach, SCT does spell out a critical type of variation to social categorisation: social categorisation is said to occur at varying *levels of abstraction*. In an application of the ideas of Rosch (1978) to the social domain, social categories can be comparably inclusive, whereby many people are considered to be class members, or comparably exclusive, whereby few people are considered to be class members. For example, in a particular context (e.g., during the Sydney 2000 Olympic opening ceremony) a categorisation scheme built around nationality (e.g., Australians in contrast with Americans) would result in social categories that include members numbering in the millions, while in that same context a social categorisation scheme built around ceremonial role (e.g.,

athletes in contrast with performers) would result in social categories that include members numbering in the hundreds or thousands; because in the latter scenario the categories have fewer members, these would be described as operating at a lower level of abstraction. SCT describes the limits of abstraction in terms of two poles. Social categorisation at the human level is described as the highest level of abstraction, including all humans and contrasting away from non-humans. Conversely, social categorisation at the person level is described as the lowest level of abstraction, including only one person and contrasting away from another person or people.

At this point it is of value to note two minor addendums to SCT's conceptualisation of the level of abstraction principle. Firstly, there have been some departures, which in our opinion are appropriate, from how person level categorisation was approached in the 1985 statement of SCT. For one, and likely as a result of an increased interest in the nature of person level categorisation, there has been a move away from considering person level self-categorisation to be the realm of one's "personality" and "individual differences" (Turner, 1985, p. 95). This has been replaced with an emphasis on person level categorisation as an outcome of social constructed reality, (Onorato & Turner, 2004; Reynolds & Oakes, 1999; Reynolds & Turner, 2006, 2012; Reynolds et al., 2010; Turner & Onorato, 1999b; Turner, Reynolds, Haslam, & Veenstra, 2006), just as is the emphasis for categorisation at higher levels of abstraction. Further, there has been a departure from thinking of person categorisation as the lowest possible level of abstraction. Instead, *intrapersonal* categorisation schemes are now posited, which occur at a lower level of abstraction to personal categorisation schemes (Reynolds & Turner, 2012; Turner & Onorato, 1999b; Turner et al., 2006). Intrapersonal categorisation

schemes are those where a partial aspect of a person is compared with another partial aspect of that same person. For example, intrapersonal categorisation could result in a categorisation scheme comparing “the me I was yesterday with the me I am today” (Turner & Onorato, 1999, p. 24)¹.

The second minor addendum to the level of abstraction principle concerns *category hierarchies*. In SCT social categories at different levels of abstraction are described as hierarchically organised; any particular categorisation scheme is said to be subsumed by a category at the next highest level of abstraction. For example, in Australia rugby union players and rugby league players all play contact sports, such that contact sports can be thought of as a more inclusive category at a higher level of abstraction, and contact sports in turn can be compared with non-contact sports, such as cricketers and golfers. Further, it is the shared membership in a more inclusive category that allows comparison between less inclusive categories to occur; “stimuli can only be compared insofar as they have already been categories as identical, “like”, or equivalent at some higher level of abstraction” (Turner, 1985, p. 96).

While there is no argument that categorisation schemes are hierarchically structured in some instances, as in our sporting example, McGarty (1999, 2006) makes a strong case that such instances are likely the exception rather than the rule and that to restrict cognitive categorisation schemes to hierarchies creates difficulties reconciling theory with experience. To use McGarty’s illustration (1999), a hierarchical categorisation scheme struggles to reasonably reflect what we know about nationality and ethnicity, where ethnicity can be subsumed by nationality (e.g., European Australians in contrast to Indigenous Australians), but in many cases is not (Europeans live in a great number of countries); attempts in

this instance to identify an ideal subordinate category is highly contrived. We therefore follow McGarty's lead and dispense with SCT's expectation that cognitive categorisation schemes are hierarchically organised. That being said, we do accept SCT's expectation that social categorisation at one level of abstraction informs social categorisation and other levels of abstraction, which is a looser rephrasing of SCT's assumption that similarity at one level of abstraction is a necessary precondition for difference to be observed at a lower level of abstraction. Indeed, Reynolds and Oakes (1999) have provided evidence that categorisation at a higher level of abstraction can influence the dimensions on which accentuation will occur when a lower level of abstraction is made salient.

With the above two qualifications covered we can now summarise the social identity approach to social categorisation: Social categorisation is our mechanism for understanding who and what people are. It entails establishing for ourselves where people fit in terms of social categorisation schemes. These social categorisation schemes result in the accentuation of features of people in such a way that differences and similarities among those people can be apprehended. The social categories themselves can include many people or very few people, and can include single individuals or even individual parts. They can also be hierarchically organised, but need not always be so. This is a good portrait of the purpose of social categorisation, how categorisation achieves this purpose, and how social categories may differ in terms of inclusiveness. Now, having established what categorisation does and what it looks like, we can attend to the factors, or constraints, that determine which particular social categories perceivers will use.

Constraints on social categorisation. Drawing on Bruner's accessibility by fit model of social categorisation (1957; see also Bruner & Postman, 1948), SCT

describes our unconscious choice among possible social categorisation schemes as determined by an interaction between aspects of the perceiver and aspects of the encountered environment. More specifically, an SCT based account is one where the form of social categorisation is determined by an interaction between *perceiver readiness* and fit, where fit is further specified as having two components: *comparative fit* and *normative fit*. We will introduce each of these in turn, beginning with comparative fit.

Comparative fit. Comparative fit, also referred to as structural fit (Oakes, 1987), describes the role of patterns of similarity and difference among encountered stimuli in directing cognitive categorisation. To be precise, and drawing inspiration from Campbell (1958) and also again Rosch (1978), comparative fit encompasses a process of comparison whereby the social categorisation schemes that we use will be in part determined by something called the *meta-contrast principle*: people are more likely to share category membership to the degree that the average differences between specific people are perceived to be less than the average differences between those people and the remaining people in the *frame of reference*; frame of reference, also referred to as the comparative context (e.g., Haslam, 2001), being the full array of people that the perceiver is presently aware of. The meta-contrast principle can be expressed mathematically by making interclass differences a numerator and intraclass differences a denominator, in something called the *meta-contrast ratio* (Figure 3.2), although the suggestion is not that perceivers engage in a step by step, precisely measured, mathematical calculation during the categorisation process. Instead the meta-contrast ratio captures the principle that guides our highly organic and immediate detection of patterns among social stimuli.

$$\frac{\sum_{d=1}^{n_d} \sum_{i=1}^{n_x} \sum_{j=1}^{n_y} |x_{di} - y_{dj}|}{(n_d n_x n_y)}$$

$$\sum_{d=1}^{n_d} \sum_{l=1}^{n_x} \sum_{m=1}^{n_x} |x_{dlm} - y_{dml}| / ((n_d n_x) (n_x - 1)) \text{ for } dlm \neq dml$$

Figure 3.2. The meta-contrast ratio as articulated by McGarty. “ n_d is the number of relevant dimensions; n_x is the number of members of some category X; n_y is the number of members outside the category X; and the x and y values are the positions of a member of one of or the other category on a particular dimension” (1999, p. 112).

The role of meta-contrast and frame of reference in social categorisation can also be illustrated by returning to our two points ‘A’ and ‘B’, but this time with a third, ‘C’ introduced. In Figure 3.3 the addition of the additional point to the right, in this barest frame of reference, informs our understanding of all objects present. Whereas previously A and B appeared neither close together nor far apart, now, without changing the number of centimetres between them, points A and B appear clearly apart from one another, while B and C appear cosy. Said otherwise, our impression of point A is now that it is in a class distinct from points B and C. Critically, neither the ‘apartness’ of points A and B, nor the ‘togetherness’ of points B and C, is an innate quality of the distance between them. It is instead an outcome of comparisons among all points in the perceiver’s field of awareness.



Figure 3.3. Through meta-contrast the introduction of additional stimuli can change our understanding of all stimuli in the frame of reference.

Although this scenario is intentionally stark, the minimalism should not mask the relevance to social categorisation as a day to day phenomenon. Just as the frame of reference is critical to making a determination of closeness vs. apartness in physical space, so too is frame of reference and meta-contrast critical to understanding people through social categorisation, including through commonly accepted or contested stereotypes. In other words, categorisation of people is not just a case of detecting real or imagined similarities between people; it necessarily requires the processing of all the encountered similarities and differences among all available comparison persons. Experimental manipulations of comparative fit have been shown to change the extent to which gender is topical (Abrams, Thomas, & Hogg, 1990), the extent to which stereotypes inform self-perception (Hogg & Turner, 1987a), change the content of national stereotypes (Haslam, Oakes, Turner, & McGarty, 1995), and change the degree to which newly encountered people are seen as similar to ourselves (Haslam & Turner, 1992). In an investigation of what were described as assimilation and contrast effects, the

principal of comparative fit has also been used to help predict attitudes and behaviours toward social groups (Wilder & Thompson, 1988).

The fact that similarity, where similarity is viewed as an intrinsic characteristic between two stimuli, is insufficient as a constraint on social categorisation creates a vernacular challenge. Indeed, in the paragraph above the language of comparative fit and meta-contrast has forced us into an apparent circularity. We have claimed that upon critical consideration similarity, and by implication also its converse, difference, cannot usefully serve as constraints on social categorisation, and instead that the role of stimuli characteristics in determining social categorisation is better explained via the concept of comparative fit, which is in turn *an outcome of the perceived similarities and differences* among people in a frame of reference. Fortunately, this circularity is only skin deep and can be resolved easily enough. To that end Oakes and colleagues (1994) recommend the use of a “psychologically natural term ... to indicate the nature of precognized stimulus relationships” (p. 98), meaning the shared or unshared qualities among people that are observed, but not yet processed. Their suggestion is “distances”, which again connects spatial relations with conceptual relations. Thus, *precognized distances* between people are to some vs. distinct as centimetres are at near vs. far; they are the characteristics of people prior to interpretation and as yet are meaningless. We adopt Oakes and colleagues’ suggested nomenclature for the remainder of this thesis. For example, the meta-contrast principle can be rephrased as follows: We are more likely to include people in the same category to the degree that the average distances between those people are perceived to be less than the average distances between those people and the remaining people in the frame of reference.

Normative fit. An intuitive way of understanding normative fit is that, while comparative fit is concerned with social category structure, in the sense of detecting patterns among stimuli and establishing category boundaries, normative fit is concerned with *social category content*. That is, normative fit describes the role that peoples' features have in determining the characteristics that we ascribe to the social categories that they are included in, or excluded from. The principle of normative fit is that the content of the social categories we use to understand people will reflect the features of category members and the dimensions on which those people are categorised. We will only use social categories that are normatively fitting, such that the category content matches category specifications.

This principle is best illustrated by one of the earliest normative fit studies, conducted by Oakes, Turner and Haslam (1991). In that laboratory experiment, the second of two studies, the authors presented participants with a film where three arts students and three science students discussed university life. In reality these students were actors, and the researchers determined in advance the attitudes that each student in the film would take to university life; these attitudes were either pro-'social life' or pro-'hard work'. There were six experimental conditions but it is a comparison between two of those conditions that is most relevant here. In one condition the three science students took a stereotypically 'sciencey' position (i.e., they were pro hard work), while the three arts students took a stereotypically 'artsy' position (i.e., they were pro social life). In the other condition the attitudes were reversed, with the science students taking a pro social life position and the arts students taking a pro hard work position. The results of the study were such that in the former condition, as per the accentuation principle, the arts students were seen as more similar to one another than in the latter condition, as measured

by the estimated level of shared belief between one particular arts student and the remaining arts students in the film. Critically, this difference cannot be explained as an outcome of differing comparative fit, because in both conditions there is an equal level of agreement within groups and disagreement between groups. It can, however, be explained as an outcome of different normative fit. It is only in the former condition that the science students in comparison with arts students categorisation scheme was normatively fitting, with the observed persons exhibiting behaviour consistent with that categorisation scheme (i.e., the science students were sciency and the arts students were artsy). In the latter condition there was poor normative fit for that categorisation scheme, with the observation of behaviour incongruous with a science students vs. arts students understanding of the scenario. In sum, category content here is having an important role in constraining social categorisation.

Really though, the principle of normative fit does not in isolation fully explain its own role. Looking back to Oakes and colleagues' study the question remains, why was the science students vs. arts students categorisation scheme not simply replaced by the perceivers with the alternative categorisation scheme of fun loving science students vs. hard working arts? The answer is, of course, that the perceivers brought with them expectations and theories about how science students and arts students behave. In terms used above, the perceivers bring with them *understanding* and *category specifications*. What this means is that normative fit is actually describing a point of connection between the experienced stimuli (e.g., university students' behaviour) and what the perceiver brings to the social categorisation table; that is, perceiver readiness, which is the third constraint on social categorisation.

Perceiver readiness. Perceiver readiness is another area in which an addendum to SCT must be made. Indeed, perceiver readiness in the sense to be discussed here is actually absent from SCT and instead the similar but still different concept of *relative accessibility* is included to describe the way in which aspects of the perceiver constrain the social categorisation process. Relative accessibility was defined as “the readiness with which a stimulus input with given properties will be coded or identified in terms of a category”, which follows Bruner’s accessibility definition verbatim (1957, p. 133). Beyond this relative accessibility was described as determined by two factors: first, the “redundant structure” of the environment (Turner, 1985, p. 102), which is the perceiver’s learned understanding of the social environment, and second, the perceiver’s current motives. Perceiver readiness, in contrast, is defined as a person’s “past experience, present expectations, current motives, values, goals, and needs” (Turner et al., 1994, p. 455).

Relative accessibility and perceiver readiness cover a lot of the same ground. Indeed, Turner and colleagues feel comfortable enough with the extent of overlap that they have used the terms interchangeably. Nevertheless, they are different and one particular difference is important enough to justify drawing a strong distinction between the two concepts. The difference we are referring to is the move away from the notion of redundant structure; redundant structure being the idea that perceivers keep with them a repertoire of social categories against which fit data is compared. In introducing relative accessibility and redundant structure Turner gives the example of a “latent” self-category of ‘Catholic’ that a perceiver may not use in the course of social perception for days at a time yet nonetheless comes to the fore given the right fit conditions (1985, p. 102).

Although intuitive, this line of thinking is deliberately absent in discussions of perceiver readiness. Redundant structure is instead replaced by far less specific references to “past experience”, with emphasis turning instead toward the affective and motivational aspects of a perceiver’s contribution to the social categorisation process. In other words, greater prominence is given to a message that the perceiver is an active participant in navigating their own social world; perceivers are not passively subject to their own social categorisation processes, which are heavily informed by dormant attitudes in their subconscious, but rather that social categorisation occurs chiefly in service of the needs and motives of perceivers (see also Oakes et al., 1994; Oakes & Turner, 1986b). Where past experience is discussed as a component of perceiver readiness it is discussed more broadly in terms of the constellation of beliefs, ideas, or theories that a perceiver may hold at any particular time. This means that perceivers’ are no longer thought of as having social categories (e.g., Catholics) ready in their unconscious at all times for deployment, but are instead considered to have notions about the relationship between nations, people, characteristics, and behaviours that may inform subsequent social category construction. These notions may arise from a perceiver’s direct past encounters with social category members, but they may also come from the internalised attitudes that others hold (see also Haslam, Oakes, Reynolds, & Turner, 1999). Why the general loosening of language in this area? To answer this question it is appropriate to turn lastly toward a discussion of the SCT concept of *salience*, and from there we will conclude our introduction to the constraints on social categorisation.

Social category salience. In SCT the term salience is used to describe the cognitive pre-potential of any particular social category, which is the perceptual end

product of social categorisation. A salient social category is one that is currently in use; it has been formed in the mind and is currently guiding social perception. This is different to common usage of the term salience elsewhere, including within social psychology, where a salience is thought of as an intrinsic property of stimuli (Oakes, 1987). Here salience is a psychological rather than pre-psychological property, meaning that it is an outcome of cognitive processes. This is not to say, however, that salience is disconnected from stimuli. In SCT the argument is that social categorisation, and therefore social category salience, must be understood as involving an interaction between fit and perceiver readiness.

What does then that interaction look like? In social psychology, including within the social cognitive tradition, the attractive response to questions around stimuli and perceiver interaction has been to suggest models of social category storage and activation (e.g., Macrae & Bodenhausen, 2000). Here perceivers bring with them a library of possible social categories, of varying availability, that can be brought to bear in relevant social situations given certain environmental cues. This is, to a degree, the approach taken in SCT, in the form of relative accessibility, redundant structure, and latent social categories. Such models are intuitive for at least two reasons. First, they are familiar, owing to the obvious metaphors with other common information processing systems. A library is one such example, which we have already used, but another is computerised file storage and retrieval. Second, models of this kind seemingly explain the consistency in social perception and social categorisation that we are able to achieve in the face of constantly fluctuating external stimuli. That is, despite the constantly shifting particulars of our environment, and category members that are never completely the same, we are nevertheless able to make use of knowledge and language across a wide range

of contexts and people. Consistency is achieved by being able to effectively store the social categories we have used in the past, and then apply those same categories in new circumstances.

The problem with storage and activation models of this type, at least for Turner and other SCT theorists, who turned away from this approach shortly after the 1985 publication of SCT, is that such models have serious incompatibilities with the core message of SCT's fit by perceiver interaction. This is because the intention of the fit by perceiver interaction in SCT has always been to ground the process of social perception in the encountered environment; to allow us to understand social categories as inherently tied to real social-structural phenomena rather than simply as pictures in our heads. This is a point that SCT theorists have made theoretically, but also empirically, most commonly by leveraging the principle of comparative fit. More specifically, studies involving frame of reference manipulations are often used to drive this point home. Such studies have shown that frame of reference not only affects the boundaries of social categories, but also the content of social categories. Haslam and colleagues (1992), for instance, demonstrated *inter alia* that including or excluding particular comparison countries shifted Australian participants' views on what was stereotypical of Americans.

Demonstrated shifts in social category content along these lines reflect the more general observation elsewhere that the social categories are highly variable and that, although the labels and language of social categorisation may remain the same, what it means for someone to be an Australian, American, female, male, rugby player, etc. changes from instance to instance based on the circumstances in which people are encountered (Barsalou, 1987). Comparative fit manipulations

take this further though by making it clear that, although such variation is constantly occurring and the permutations apparently infinite, it is also systematic and predictable. In terms of the psychological process of social categorisation then, it becomes apparent that a predictive model is within the realms of plausibility, but in order to be realistic that model must also describe a process that is highly fluid and allows for social categorisation to be responsive to the encountered stimuli. Or in the language of the precursor accentuation research, if social categorisation serves to enhance perceptual acuity, the shape of the social categories that become salient must be directly informed by the nature of the category instances.

It is these parameters that rule out models where the perceivers bring with them stored social categories for application to sufficiently fitting stimuli. This is because such models do not include a pathway by which those stored social categories are able to be adapted to the present circumstance. Without that pathway social categories cannot be responsive to encountered stimuli. Instead, social categories become a lens through which a perceiver may understand the social world *in spite of* encountered stimuli, hence running afoul of the intention of SCT to ground social categorisation in the encountered environment via the fit by perceiver interaction. A category storage and application account of social categorisation does move salience away from being an inherent quality of stimuli, but instead of treating salience as outcome of fit and perceiver interaction, it essentially places salience in the domain of the perceiver; hence the change in theoretical perspective on the part of SCT theorists.

There are other problems with category storage and application models, some of which are used by SCT theorists to further argue against their plausibility. For example, Turner and colleagues point out that if the categorisation process is

one of storage and application, then for this to function our minds must be required to maintain an impractical quantity of social categories in storage; a unique social category for every single inference that a perceiver has ever made about all types and subtypes of people (Turner et al., 1994). This argument is not water tight, however (McGarty, 1999), and it is fair to say that it takes a back seat to the observed need to *give fit its due* in social category salience.

What then do SCT theorists now suggest in place of a storage and application model? We have already seen that relative accessibility has been replaced with perceiver readiness, which entails more loosely our past experience as a constraining factor, but what does the salience determining interaction now look like as a psychological mechanism? Here SCT theorists push for the adoption of an *online category formation* approach to social categorisation (P. M. Brown & Turner, 2002; McGarty, 1999; Oakes & Turner, 1990; Reynolds & Turner, 2006; Turner, 2001c; Turner et al., 1994; Turner et al., 2006), meaning that at each instance that a social category becomes salient it has been *constructed anew*. Rather than social categories *existing somewhere* prior to use, either as a characteristic of stimuli or within the perceiver, the form that any particular social category takes is an emergent phenomenon. Instead of viewing the fit by perceiver interaction as a kind of moderation (i.e., the presence or absence of fit cues moderate the psychological salience of social categories) here neither the external environment nor the perceiver's mind are sufficient for a social category to exist; the interaction is thus an act of creation, one that uses the raw materials of fit, in the form of comparative and normative fit, in combination with perceiver readiness, in the form of our past experience that provides us with theories, ideas, and beliefs as to how our social world works. Social category salience then, which

is the cognitive pre-potency of any particular social category, is an outcome of the generation of social categories, not their application or activation.

Summary

This chapter achieves two key goals. First, it makes clear the need to develop our understanding of transference beyond the currently dominant social cognitive model of transference. This was achieved by pointing out three important limitations of the model when it comes to a theory of transference. These were similarity based cueing, SO representation storage, and SO representation application.

The second goal of this chapter was to introduce the social identity approach, with particular focus given to the model of social categorisation that can be derived from SCT. It is this model that we will use in Chapter 5 to take up the identified challenge and progress our understanding of transference. This model is one where social categorisation, which is understanding who people are by knowing what other people they are equivalent to and what other people they are different from, is recognised as an omnipresent cognitive process that allows us to navigate our social world by cognitively accentuating preconized distances in a way that provides greater perceptual acuity. Social categories can exist at varying levels of abstraction, including very few people or very many people, and any particular social category becomes salient as an outcome of a category creation process. That category creation process is constrained by the interaction between three factors: comparative fit, which involves a comparison between average intraclass distances and average interclass distances, normative fit, where category member characteristics inform social category content, and perceiver readiness,

which is influenced simultaneously by a perceiver's past experience, present expectations, current motives, values, goals, and needs.

Notes

1. One might also now wonder whether the original upper limit on social category abstraction, categorisation in terms of humans in contrast to other species, will remain unchanged once subjected to further attention. Perhaps categorisation on the basis of sentience will soon be considered to be a more appropriate highest level of abstraction for social categorisation.

CHAPTER 4

HURDLES FOR A SELF-CATEGORIZATION THEORY BASED ACCOUNT OF TRANSFERENCE

With a detailed model of social categorisation under our belts, we are almost in a position to articulate a new model of the cognitive processes that underpin transference. We say “almost” because before doing so we hope to, in this chapter, clear up in advance some of the confusions and misunderstandings that are likely to, as they have in the past, prove a barrier to the acceptance of explanations for social phenomenon derived from SCT and the social identity approach.

There is another way to think about this task. This is to ask the question; why hasn't this been done before? Why it is only now, 25 years after transference entered the social psychology scene, that a detailed social categorisation based account of transference is being proposed? Let alone one based specifically on the social identity approach, which has proved so influential elsewhere (Postmes & Branscombe, 2010).

In this chapter we advance three reasons as to why the transference literature has thus far remained largely insulated from the social identity approach. The first concerns a philosophical schism that exists between the social identity approach and the social cognition approach; that is, between social constructionism and objectivism. The second concerns the very different conceptualisations of social categories across the two approaches, which we argue reflects a tendency that is common across psychology to segregate cognition on the

basis of stimuli type. Finally, we address the fact that, despite a vast literature, the social identity approach is for many an inaccessible body of knowledge. Here we point to a number of reasons as to why this has become the case, with some attribution to certain decisions made by the architects of the social identity approach in relation to how the ideas are presented and how theoretical advances are managed. These three areas, which can be thought of as contributing to a degree of research inertia, can each be sensibly titled in terms of a key antagonism. These are, respectively: the social cognition approach versus the social identity approach, individual level processes versus group level processes, and the social identity approach versus itself.

The social cognition approach versus the social identity approach

I was frequently put off by the frequent appearance of rhetoric that opposed social identity and social cognition approaches. With my own background solidly in social cognition, I was at first prepared to reject any viewpoint some of whose proponents seemed to brand me and my entire research tradition as the enemy. (Smith, 1999, p. 183)

The above quote is a frank assessment, rare in writing, of the relationship between the social cognition and social identity approaches. Smith's comment here speaks to a degree of intergroup conflict between researchers in these two social psychology camps. Smith's language is also apt in hinting that it was perhaps social identity theorists who first placed the social cognition and social identity approaches so firmly in competition with one another. Turner in particular was known to be impatient for progress in the field and uncompromising in his

discourse with fellow researchers (Reicher & Haslam, 2015). Indeed, in numerous publications Turner, along with his colleagues, can be seen to be very reluctant to pull punches in their commentary of others' work (e.g., Oakes et al., 1994; Turner, 2006; Turner & Bourhis, 1996; Turner & Reynolds, 2003). This no doubt would have been uncomfortable and unwelcome for the particular targets of this ostensibly unrestrained criticism, particularly as Turner and colleagues' tendency toward published confrontation was counter normative for a field more accustomed to geniality than unforgiving debate. This would make it hard for even the most ego-free of social cognition researchers to take cues from the other side of the divide. Indeed, it appears that the influence attempts of social identity theorists directed at the social cognition field have been in part frustrated by the ingroup/outgroup based influence processes that they have been able to bring such clarity to elsewhere (see the theory of referent informational influence, Turner, 1982, 1985, 1991; Turner et al., 1987).

This very human element to the story should not be over emphasised. Indeed, the modicum of pugnaciousness on the part of social identity theorists, and defensiveness on the part of social cognition researchers will get no further attention in this thesis. Nonetheless, it was an impactful reality during the period of research of interest to us here and therefore must be addressed if we are to get an authentic sense of the relevant research context. Moreover, attending to the rivalry also underscores the fact that the social cognition and social identity approaches exist as two distinct research trajectories (Operario & Fiske, 1999). After all, intergroup relationships do not emerge independent of social realities (Turner, 1999a; Turner & Reynolds, 2001). The intergroup relationship we have just described, and corresponding social identification of researchers with either

camp, only makes sense if there are real differences between the social cognition and social identity camps. We thus cannot be accused of reifying an otherwise arbitrary distinction between the social identity and social cognition traditions.

A metatheoretical debate

What then are the differences in theoretical approach that have been so irreconcilable for social cognition and social identity researchers? This question is actually best answered by in the first instance avoiding comparisons between particular theoretical assertions, and instead exploring the differences between the social cognition and social identity approaches in terms of *metatheory*; metatheories being “loosely organised and often implicit sets of ideas and value statements that identify important problems, appropriate modes of theoretical discourse, broad assumptions about human nature, philosophical questions, and so on” (Markovsky, 1994)¹. This is because the social cognition and social identity approaches have fundamentally different metatheories underpinning the interpretation of their respective theories and models. As is often the case in psychology (Staats, 1983), it is these differences at the metatheoretical level that are driving the proverbial wedge. In the present case these metatheories concern the role of the perceiver in social perception.

For the social cognition approach the question of social perception is about how and when perceptual distortions are created by the psychological processes utilised by perceivers (Hogg & Abrams, 1988). In other words, the social cognition approach has concerned itself with understanding the systematic deviations between social reality and our social perception. The cognitive miser and motivated tactician concepts are good examples of this. These have been go-to metaphors for social cognition researchers looking to communicate the way in

which perceivers navigate social landscapes (Fiske & Taylor, 1984, 1991; see also Allport, 1954). In terms of the former, perceivers are said to be cognitive misers in the sense that they will default to comparably effortless cognitive processes in order to build their picture of the world (i.e., they are miserly with their use of cognitive resources). Here effortless processes are those that leverage the theories, expectations, and memories that a perceiver already has on hand. This is contrasted with comparatively effortful cognitive processing, where the perceiver does the additional work required to take into account new experiences and new information and subsequently develop new and more accurate theories and expectations. Fiske and colleague's well known *continuum model of impression formation* is an example of theory that is consistent with this view (see Fiske & Neuberg, 1990). In that theory any particular instance of person perception is posited to exist somewhere on a conceptual continuum between effortless and effortful cognitive processing. At the extreme of effortless processing a target person is made sense of by way of categorisation, in that a perceiver's stereotypes about familiar social categories are applied to that target irrespective of the target's actual attributes. At other extreme effortful processing takes the form of "individuation", where impression formation goes "beyond category membership" (1990, p. 1) and is based wholly on those attributes that the target person possesses. In that theory, and in line with the metaphor, perceivers are said to opt for more effortless category based impression formation where possible, moving toward effortful and attribute based perceptions only when the result of effortless categorisation proves unsatisfactory. What is a satisfactory versus unsatisfactory perceptual result is determined by whether there is a fit between the category being applied and target attributes; if target attributes cannot be reconciled with

category content then the perceiver is forced to abandon that particular category based impression and try again with an increased level of effortful processing of target attributes.

The motivated tactician metaphor was introduced as an extension to that of the cognitive miser; the intention being to more adequately capture the role of perceiver goals and motivations in determining the extent to which effortful and accurate cognitive processes are used. In the continuum model, to continue the example, this is reflected in the anticipation that perceivers will move toward the effortful extreme of the continuum when they are motivated to do so by features of the target, their own goals, or the relationship between themselves and others in the present situation. Fiske and Neuberg (1990) provide the example of a perceiver who is assessing job applicants at the direction of their boss. Here, as a function of the relationship between the perceiver and their boss, concern about the implications of selecting an inappropriate applicant, and thus earning disapproval, may motivate the perceiver to make additional effort to ensure the accuracy of the impression of applicants. Alternatively, if it is understood that their boss expects certain categories of people to not be hired, the perceiver can be motivated to adopt category based impression formation. In either case, rather than simply minimising cognitive effort until confronted with perceptual incongruences that are unable to be ignored, the perceiver is deploying cognitive resources tactically, striving for the best possible outcomes while keeping effort expenditure at a minimum. In any case, the basic idea remains the same. When viewed as either a cognitive miser or a motivated tactician the core contrast is between perceivers making inferences about people on the basis of their prior

understandings and presumptions and perceivers understanding people on the basis of actual observation; or in other words, who they really are.

It is particularly useful to pay close attention to the way the concepts of *stereotyping* and *social categories* are invoked in the continuum model of impression formation. In particular, and although the labels are the same, it should be clear that the process of stereotyping and social categorisation as described in the continuum model bears scant resemblance to the account of social categorisation that we introduced in Chapter 3. Indeed, this relates closely to the distinction we made in that chapter between common accounts of stereotyping versus social categorisation as it is conceptualised in SCT. There we pointed out that stereotyping is typically characterised in terms of inaccuracy, exaggeration, and approximation. In the continuum model stereotyping together with social categorisation *as inaccuracy* is played out in the extreme. This is because in that model understanding people via stereotypes and social categories is made poles apart from the process of understanding people on the basis of reality. This is not to say that stereotypes and social categories are not considered to be potentially useful for a perceiver, particularly as a cognitive resource saving tool, but in the continuum model they are defined as things that are an alternative to reality.

The incompatibility with an SCT based account of social categorisation should be obvious. As emphasised in our introduction to social category salience in Chapter 3, for social identity theorists, social categorisation is understood as a process that always involves an interaction between social stimuli and what the perceiver brings with them in the form of goals, motivations, theories, and expectations. In fact, the continuum model, which puts social categories strictly in the heads of perceivers, is a perfect example of the kind of category activation and

application account of social categorisation that we have contrasted SCT against (see also Haslam et al., 1997). The continuum model is far from alone. Brewer's *dual process model of impression formation* is a similar theory where a perceiver's contribution to social perception is again a deviation from what is real. In that theory social perception is said to occur via one of two processes; either top down processing or bottom up processing (Brewer, 1988). Critically, bottom up processing is said to be *data driven* and based on the actual observed features of an individual, while top down processing is once again understood to be category based, which corresponds to the beliefs that the perceiver already has on hand, unadjusted to reflect observed realities. Overall the process of social categorisation as understood in both these dual process models of impression formation is closer to what elsewhere is described as *schema based processing* (Hogg & Abrams, 1988), where social schemas are the mental structures that capture our preconceived ideas about the social world (Reynolds & Oakes, 1999). This is also true of the schema triggered affect model (Fiske & Pavelchak, 1986), which we came across in Chapter 2 as a model considered to be a forerunner to the social cognitive model of transference. In sum, schema theories of social perception contrast the social perceptual contribution of perceivers *against social reality*. Social schemas are "pictures in our heads" (Lippmann, 1922/2007, p. 9) that are applied in a way that creates deviations from what would otherwise be the observed reality of whatever social situation is at hand.

Could this particular gulf between the social identity approach and the social cognition approach be resolved simply through clearer nomenclature? Do we just need language that clearly distinguishes between the process of social categorisation, which is the end result of an interaction between social reality and

a perceiver's contribution, and social schemas, which are the stored mental representations that we also use for impression formation or when faced with other social perceptual needs? The answer to this question is no, and the reason why brings us back to an incompatibility at the metatheoretical level.

An SCT based account of social perception unconditionally and inextricably connects social reality and a perceiver's contribution to social perception. The insistence on this connection means that social identity approach and SCT does not play well with any theory that in any way suggests that some kind of objective reality, unaffected by perceptual influence, should be the standard for veridical social perception. The adoption of that standard is ubiquitous to the social cognition approach, with varying degrees of explicitness depending on particular theories; the continuum model of impression formation and dual process model of impression formation being examples where that perspective is adopted very explicitly². This brings us to the crux of the metatheoretical schism. The social cognition approach, as should by now be apparent, is deeply underpinned by a metatheory of objectivism in the sense that it presumes that social reality can be understood independent of a particular viewpoint or perspective³. In stark contrast the social identity approach and SCT embraces a metatheory of social constructionism, meaning that what is real is what is consensually established as factual, accurate, correct, and so on, among perceivers with respect to the particular vantage point of those perceivers (see also Operario & Fiske, 1999). Critically, the latter is not an acceptance of pure *relativism* (Oakes, 2001; Oakes et al., 1994), where perception is constraint free and any and all opinions on the world have the potential to be veridical. While the two are at times conflated (e.g., Funder, 1995), social identity theorists have been careful to make clear that they

are still *materialist* in that they accept the important premise that there is a universe that does exist outside of social perception (Turner & Oakes, 1986). The position instead is that the material world cannot be understood without engaging in some kind of perspective taking (see also Haslam et al., 1997), which of course follows the long standing philosophical point that reality cannot be established any way that is not mediated via the subjective understanding of perceivers; or more poetically, “that experience is incomplete until transformed, by some unseen power, into part of oneself” (Fernández-Armesto, 2009, p. 221). This social constructionist metatheory of the social identity approach has also been called the *meaning making* approach, which is a way of giving prominence to the epistemological implications of the SCT account of social categorisation. As we saw in Chapter 3, for social identity theorists the process of categorisation coverts the buzzing confusion of sensory stimuli into an understandable environment. In other words, it is the process of categorisation that imbues data *with meaning* (see also Eiser, 1996).

Social identity theorists were far from the first to bring social constructionism to the social psychological study of social perception. Bruner’s own account of categorisation, which we have already introduced as a source of inspiration and ideas for the social identity approach, is one early example. Interestingly though, that work is often alternatively cited as a precursor for social cognition’s objectivist approach to social perception. In terms of that latter interpretation, Bruner’s work is described as suggesting that categorisation is an act of “going beyond the information given”, where “the information” is understood as the observed qualities that stimuli *actually have*, which through categorisation come to be marginalised or altogether ignored (e.g., Higgins & King,

1981). Bruner's concept of categorisation is also often described as serving to simplify and to trim back information that is otherwise available in the perceptual field (e.g., Cikara & Van Bavel, 2014; Fiske & Neuberg, 1990; Macrae & Bodenhausen, 2000). Either interpretation is a misreading of Bruner's work, however (Oakes et al., 1994; Oakes & Turner, 1990; Ottati & Lee, 1995), and misses Bruner's key message that "whatever is perceived is placed in and achieves its "meaning" from a class of percepts with which it is grouped" (1957, p. 124). Relevantly, misinterpretations along these lines are common within the transference literature (Andersen & Berenson, 2001, p. 238; Andersen & Berk, 1998, p. 82; Andersen & Chen, 2002, p. 269; Andersen et al., 1995, p. 41; Hinkley & Andersen, 1996, p. 1279) and the notion of going beyond the information given in an objectivist sense was part of Andersen and Glassman's introduction to the social cognitive model of transference (see Chapter 2).

Another example of social constructionism in social psychology is Medin and colleagues' advocacy for a *theory based approach* to categorisation over a *similarity based approach* (e.g., Medin, 1989). His theory based approach is social constructionist in that the categories we use to understand and explain patterns among observed phenomenon are said to be necessarily constrained by some prior theory that the perceiver has of those same patterns. A similarity based approach, whereby categorisation simply reflects the selective attention to categories that already exist "out there" (i.e., things that are similar are classed together and things that are different are classed apart), is deemed insufficient on both empirical and logical grounds. The logical argument is compelling, and Murphy and Medin's example of the sources of similarity between plums and lawnmowers is illustrative:

Both weigh less than 10,000 kg (and less than 10,001 kg,...), both did not exist 10,000,000 years ago (and 10,000,001 years ago,...), both cannot hear well, both can be dropped, both take up space, and so on. (G. L. Murphy & Medin, 1985, p. 292)

The point of this entertaining list is to make clear that the number of shared properties among plums and lawnmowers is essentially infinite (see also Oakes & Turner, 1990). The implication being that what it is to be a plum as opposed to a lawnmower, and vice versa, could mean anything, and by extension means nothing; that is, until the perceiver makes a contribution in the form of a constraining theory. This is largely equivalent to SCT's own insistence that categorisation is simultaneously a data driven and a perceiver driven process, manifesting there more specifically as the perceiver readiness by fit interaction. Indeed, Medin, Goldstone, and Genter suggest SCT as a good example of theorising that captures the "interactive nature of comparison processes and reasoning" (1993, p. 269).

Looking to the converse, it is also the case that social cognition researchers were far from the first to bring objectivist standards to the social psychology of social perception. Instead it is fair to say that objectivism, and a preoccupation with the perceiver as a source of biases away from reality, has long been the norm in social psychology (Jussim, et al., 1995; Turner, 2001c), as well as psychology in general (Nisbett & Ross, 1980). What the social cognition approach did do is advance objectivist accounts of the social phenomena also within the bailiwick of the social identity approach, proposing cognitive mechanisms as explanations that were ostensibly highly similar, yet fundamentally very different. Indeed, there was enough metatheoretical difference between the social identity and social cognition

explanations to almost guarantee that efforts on the part of social identity theorists to critique social cognitive contributions would appear misplaced, and even at times incoherent. What better way to generate frustration than to have one's concerted attempts at scientific advance be persistently misunderstood, dismissed as erroneous, and on occasions ignored? Worse, what for a scientist could be more infuriating than having one's own ideas and theories, again due to incomprehension, also profoundly misrepresented to others, as was often the case when social cognition researchers made their own efforts at communicating social identity ideas (Haslam et al., 2010; McGarty, 2001; Turner, 1999a, 2001c; Turner & Reynolds, 2001)? All this during a high stakes game; these areas of scientific enquiry having very real societal and political consequences.

Objectivist implications for transference

Turning back to transference, the result of the above is that the social psychology of transference is to date largely untouched by social identity ideas. In fact, it remains in many ways a paragon of the social cognition approach, with the firm objectivist grounding that we might expect. Andersen and Berk (1998), for instance, while accepting that all knowledge generation involves some degree of perceiver driven meaning making, nonetheless characterise such processes as inherently resulting in error and bias. In terms of transference specifically, although the authors readily concede that the process may not always be harmful to the perceiver, they squarely brand transference as "reality confusion", always resulting in the "distortion of the real characteristics of the new person" to varying degrees (1998, p. 92; see also Andersen & Przybylinski, 2012). Two other good examples were also introduced in Chapter 2. One is the linking of transference with cognitive resource scarcity (Kruglanski & Pierro, 2008), where fewer cognitive

resources are predicted to increase reliance on transference, and the other is the linking of transference to a theorised dispositional tendency to rely on schema based processing (Pierro & Kruglanski, 2008). In both cases, and in line with the cognitive miser and motivated tactician viewpoints (in the second example the motivated tactician metaphor is invoked explicitly), transference is viewed in contrast with cognitively effortful social perception that is geared toward accuracy. Przybylinski and Andersen (2012) come closest to a departure from social cognition's objectivist metatheory, suggesting that transference is critical in giving meaning to social perception by acting as a lens through which to interpret and respond to new people. This meaning making rhetoric, however, is still somewhat of a veneer. The authors retain a view of transference as a source of bias in social perception, along with the process account whereby SO representations are stored in memory and applied as an alternative to actual observations.

In viewing transference as an irrational process that results in erroneous perceptual outcomes, this social cognitive treatment of transference is not inconsistent with the clinical accounts that have come before (Andersen & Baum, 1994). As we saw in Chapter 2, Greenson's (1965) clinical definition of transference, considered useful in the social psychological literature (Andersen & Przybylinski, 2012), includes "inappropriate to that person" as a feature (1965, p. 156). Indeed, as far back as Freud transference has been considered notable because it results in deviation from otherwise rational perception (Breuer & Freud, 1895/2000; Freud, 1912/1950). What is different about the social cognition approach is its focus on the cognitive mechanism underpinning transference, irrespective of particular interpersonal outcomes, which in turn puts front and centre the social cognitive contrast between accurate perception of newly

encountered people, involving effortful and data driven processing, and transference, involving effortless perception based perceptual shortcuts. Conversely, this emphasis on transference as a par-for-the-course cognitive process in social perception makes the emotional and motivational aspects of transference a secondary concern, as we have seen in Chapter 2.

In sum, the current social psychology of transference is deeply rooted in the social cognitive tradition. This is a key reason behind the transference literature having thus far remained insulated from the advances made in the understanding of social perception that has emerged from within the social identity approach. More specifically, this due to the intergroup dynamics operating between the two approaches, and relatedly their starkly contrasting metatheories. Indeed, the latter, objectivism versus social constructionism, appears to have absolutely undermined discourse across the two approaches; the result has been akin to having two different languages of social psychology.

Related metatheoretical challenges

Elsewhere it has been suggested that the critical metatheoretical schism between the social cognition and social identity approaches is due to the deep-seated *individualism* of the social cognition approach (Oakes & Reynolds, 1997; Oakes & Turner, 1990; Reynolds & Oakes, 1999; Turner, 2001a). Individualism meaning here the belief that only the differences and similarities that exist at the individual level are real and are therefore the benchmark for what is veridical (e.g., Ryan, 1995); differences and similarities observed between collections of individuals or social groups are at best approximations, or heuristic reflections, of those real individual level relations⁴. While this additional metatheoretical divide does exist, and is also a barrier to communication and cross fertilisation between

the social cognition and social identity approaches, in our view it presents less of an obstacle than the objectivist versus social constructionist incompatibility. In fact, it is our suspicion that efforts to critique the individualism of the social cognition approach have frequently been ineffective *because* those efforts have not sufficiently emphasised and explained the social constructionist foundation of the social identity approach.

This is not to say that efforts at explaining the role of social constructionism have not been made on the part of social identity theorists. It is just that the role of social constructionism in informing theory is invariably given only a passing mention, or is left implicit, in the context of a concerted disputation of individualism. This may be a conscious decision, and the reasoning may be that once the edifice of individualism comes down, theorists will have no choice but to also embrace a social constructionist social psychology. As Skorich and Mavor (2013) have made clear, however, it is possible to disentangle individualism from objectivism. They argue convincingly that both the perception of individuals and the perception of collections of individuals can be thought of as varying between data driven and memory based processing. This means that recognising individual and collective based perception as equivalent does not necessitate acceptance of social constructionism. In fact, the social cognition approach already posits from an objectivist standpoint a number of individualistic, or at least non-collectivistic, memory based perception tools as alternatives to actual observed reality. A number of these we have already mentioned. These include, relational selves, cognitive schemas generally, as well as, topically for us, SO representations. These are all examples where the activation and application of these perceiver resources are available as an alternative to perceiving people based on their real

characteristics. In sum, abandoning individualism does not necessarily mean abandoning objectivism. Instead, similarities and differences observed at the level of the individual as the standard for reality may simply be replaced by an alternative benchmark. Overall, we suspect that it is social constructionism, not a departure from individualism, that is the more difficult pill to swallow.

Another kind of group versus individual divide in psychology has, however, played a role in insulating the social psychology of transference from the social identity approach. The status of transference as a process of applying characteristics *from individuals to individuals* has been critical in justifying the separation of transference from categorisation processes. The rationale is that individual based perception should be driven by psychological processes dedicated to that domain. This line of thinking is related to the above metatheoretical debate, but it also exists independent of it. It is therefore appropriate to explore this second hurdle in its own dedicated chapter section.

Individual level processes versus group level processes

In Chapter 2 we saw that two of the distinguishing features of the social cognitive model of transference was that a) the source of transferred content is SO representations that have an n-of-one quality, and b), that these SO representations are chronically accessible. With regard to the latter, while we can readily accept that there is, in general, a high degree of readiness to use SO information in social perception (as opposed to ethnic information, nationality information, gender information, etc.), differences in readiness, or accessibility in the social cognitive language, are a distinction in degree rather than kind; varying degrees of accessibility, including chronic accessibility, is accounted for satisfactorily by general ideas of cognition (Van Rooy et al., 2003). As such, the

greater accessibility of SO information does not serve as a basis to posit a separate cognitive process. Really then, the key distinguishing feature of the social cognitive model of transference is its n-of-one SO representations; SO representations being stored exemplars that correspond to collections of knowledge about a single person only. These are contrasted with social categories, which are said to instead capture knowledge about collections of individuals. It is on this basis of this distinction that transference is argued to be a non-categorical process. As stated by Andersen and Glassman, “we argue that SO representations are n-of-one representations rather than multiple-person categories, because they represent single individuals” (1996, p. 267). This puts the process of transference ostensibly outside of the sphere of relevance of the social identity approach; that approach and its constituent theories, SIT and SCT, quite clearly describe and are built around social categorisation processes.

In Chapter 3, however, we saw that the social identity approach does not restrict social categorisation to the domain of collections of individuals (Turner et al., 2006). Instead, it posits that social categorisation is the ubiquitous foundation of all social perception, regardless of quantity of individuals in question. This is made clear in the level of abstraction principle, which states that social categories vary in inclusiveness, spanning from extremely inclusive (e.g., all humans in comparison with other sentient beings), down to the individual level (e.g., myself in comparison with the remainder of my family), and further down still to the intraindividual level (e.g., myself today in comparison with myself yesterday); the intraindividual level being a more recent inclusion that is consistent with the anti-individualistic metatheory that goes hand in hand with SCT (Turner & Oakes, 1986). Needless to say, this understanding of the limits, or rather limitlessness of

social categorisation, is very different. Here we spend a bit of time resolving this incongruence. More precisely, we take the time to explain the style of thinking in social psychology that has lead transference theorists to carve out a non-categorical space for SO representations. Again, by devoting some attention to this area our hope is that we can overcome what might otherwise prove to be a considerable hurdle to accepting a social identity approach to transference. What we will be discussing here is the failure to distinguish between *psychological social categories* and *sociological social categories*.

Psychological social categories versus sociological social categories

We have already introduced psychological social categories at length. These are, as detailed in Chapter 3, cognitive classifications of persons, or intrapersons, into classes that reflect particular perceived equivalences of those who fall within those classes. These are the psychological creations that allow us to navigate the social world, necessarily founded upon both perceiver and stimuli elements. Sociological social categories are something different. Sociological categories are features of public discourse referring specifically to collections of individuals that have some acknowledged and accepted implication in the day-to-day goings on in our lives. Sociological social categories are also often the subject of contention, and are bound up in issues of socio-political change. Indeed, the classic examples of sociological social categories are those that come from the areas of controversy and disputation, such as within the domains of ethnicity (e.g., black and white), gender (e.g., male and female), political allegiance (e.g., progressive and conservative), as well as economic and social status (e.g., proletariat and aristocracy). Other more innocuous examples may come to be known through their implications for family life (e.g., mothers, fathers, siblings), education (e.g.,

students, tutors, professors), maintenance tasks (e.g., plumbers, electricians, mechanics), recreation (e.g., skiers, scuba divers, horticulturalists), and so on. In either case, the distinguishing characteristic of sociological categories is that they are collections of individuals that have for whatever reason become a point of interest in public consciousness. That is, not only are these categories of people that individuals are conscious of, but they are categories that are talked about with one another, often at great length and with great intensity. Thus, a clue that a particular social category might be a sociological category is that there is a familiar nomenclature readily available for it.

This particular psychological/sociological distinction is different to that which has been articulated elsewhere in social psychology. Social identity theorists have been at pains to make clear the critical distinction between social categories that perceivers apply to others and social categories that perceivers apply to themselves. This distinction has been called the difference between sociological categories and self-categories (Turner & Bourhis, 1996; Turner & Reynolds, 2001), or the difference between sociological categories and psychological groups (Reynolds, Jones, O'Brien, & Subasic, 2013), and accepting this difference is a prerequisite for making sense of the social identity approach's contribution to our understanding of a range of commonly studied group phenomena (in particular, ingroup favouritism and intergroup relations). Here, however, we are not especially concerned with social categories applied to oneself. In the present sense both psychological categories and sociological categories may be applied either to others or to ourselves. The issue here is that psychological social categories encompass all cognitive classing of persons (or intrapersons) used to navigate the social world regardless of our awareness of our use of those categories, while

sociological social categories are only those that we are aware of and that have become established in common discourse (see also "social grouping"; Fiske & Neuberg, 1990, p. 10). In short, sociological social categories are those that are likely to be studied by sociologists.

Really, sociological social categories are a restricted subtype of psychological social categories; one that is limited to generally acknowledged classes of multiple individuals. This distinction is important for social psychology. What occurs in social psychology is that, when delving into psychological categorisation processes, researchers look first and foremost to those examples of social categorisation that have captured the attention of researchers and the lay community alike; namely, highly impactful sociological social categories. This in and of itself is unproblematic, however, somewhere along the way the social psychology of social categorisation becomes *only* about the psychology of sociological social categories. In other words, what it is to be a psychological social category comes to be conflated with what it is to be a sociological social category; psychological social categories come to also be defined as mental representations of generally acknowledged classes of multiple individuals.

A psychology of stimuli types

Why does this happen? Why does the psychology get limited to a particular type of social stimuli? The answer lies in psychology's tendency to posit separate psychological processes for each possible type of input or output to those processes. By this we mean that an observed distinction among stimuli often leads researchers to make parallel distinction within the corresponding theorised mental architecture. The work of Andersen and Kltazky (1987), published shortly before Andersen took interest in SOs, serves well as an illustration of this process.

That paper explores the memory characteristics of different types of cognitive representations; specifically looking for structural differences between cognitive representations of traits and cognitive representations of social stereotypes. Taking these two types of social stimuli as the starting point, across three studies they find support for their expectation that the two types of representations possess clear differences in terms of richness and distinctiveness. On the basis of these findings the authors then theorise additional possible qualitative differences between trait and social stereotype representations (e.g., accessibility and processing speed), furthering the case that the original stimuli distinction is one that is paralleled in the architecture of our minds.

The social psychology of perception is replete with other examples of this theorising style, and indeed we have come in contact with a number of these in Chapter 2. Higgins and King's "categories" versus "proper constructs" is illustrative. In that dichotomy the former "consist of information about a class of objects, events, or properties", whereas the latter "consist of information about a specific, individual object or event" (1981, p. 71). Here what can be maintained as a distinction between different types of stimuli is reified as a distinction between psychological processes, with a different type of mental representation allocated to each type of stimuli. The idiographic versus nomothetic distinction, made in the context of the relational self, follows the same pattern. What was originally a methodological distinction morphed into a distinction between different types of transferable social knowledge (for a critique of nomothetic-idiographic distinctions see Sarbin et al., 1960), which then became the basis for a distinction in terms of process; idiographic knowledge was posited to be underpinned by cognitive processes apart from those which underpin nomothetic knowledge.

Along the same lines, Brewer and Gardner (1996) divide up the processes that determine self identity on the basis of what essentially amounts to a taxonomy of stimuli inputs. First, there is the individual self, which is represented in the form of schemas that capture a person's unique traits and characteristics. Second, there is the relational self, which is a reflection of a person's interpersonal relationships and role relationships that involve personal bonds with others. Finally, there is the collective self, which is derived from membership in social categories and the corresponding schematic content, or group prototype, of those categories (in line with the social cognition approach social categories are depicted here as stored representations that the perceiver carries around with them). Sedikides and Gaertner (2001) take a similar approach, arguing that the self is comprised of four relatively independent mental representations: the individual self, the relational self, the familial self, and the collective self. Again, the driving force behind these psychological distinctions is a system of demarcations drawn between social stimuli: ourselves versus our relationships versus our families versus our group memberships.

What then drives this tendency to carve up psychological processes on the basis of stimuli type? Here we suggest that there are two factors that lead researchers down this path. The first of these is the intuition that our conscious experience of social perception should to some extent be reflected in the cognitive mechanisms that produce those experiences. That is to say, the expectation that what produces our experiences will in some way *look like* those experiences. Where does our experience of things, experience of people, or experience of ourselves come from psychologically? To lay people and researchers alike there is an appealing simplicity to the sense that these things are straightforwardly stored

in our minds, much like you would find sporting equipment stored in a cupboard. In fact, there is often a real physicality to this, with a sense that certain concepts, ideas, and memories should be isolated in particular regions in our brain architecture.

Of course, given the present limitations of what is known about memory and the mind, it is unsurprising that we should turn to our intuition to put something in place of what is otherwise largely a black box. There is probably something quite defensible in postulating cognitive processes that are more or less direct extrapolations from the experiences that they produce. There must be some connection between the two after all, and an attempt to reverse engineer processes from outcomes is not an unreasonable way to approach the problem. There are limits though, and there are good reasons to be sparing in the assumed congruence between experience and process. The fleshy mess that is our brains is one, as it is difficult to see where clearly differentiated and largely independent cognitive processes would reside inside that richly interconnected network of synapses and neurons. From this perspective we might come to anticipate the opposite state of affairs; that the cognitive processes that underpin our conscious experience actually bear little resemblance to those experiences. McGarty's (2002) concept of *sub-symbolic knowledge* is useful here. Sub-symbolic, or implicit, knowledge is that which is present in the mind but not in any form that we might recognise it; it lacks the symbolic structure that allows knowledge and concepts to be consciously apprehended and communicated to others (see also Eiser, 1996; Smith, 1996; Turner et al., 2006). The point here is that what underpins our symbolic experiences may well be sub-symbolic in nature, meaning that it cannot be fittingly described using labels derived from our conscious and communicable lexicon.

Another reason that we might not expect the divisions among cognitive processes to mirror the divisions in our perceptual experience is the presumable need for some efficiency and adaptability among human cognitive processing. The human mind needs to be able to process an inordinate amount of stimuli and stimuli types. In fact, it has a demonstrated ability to grapple with a vast amount of information, as well as quickly accommodate novel stimuli inputs of an essentially infinite variety. It would make sense then that any particular cognitive process would be able to cope with a vast array of stimuli types, and similarly produce a wide range of perceptual and behavioural outputs. We would expect the powerful processor that is the human mind to be comprised of cognitive processes that are also powerful in and of themselves, not narrowly limited in purpose and certainly not limited by stimuli type. Said otherwise, from this perspective we should expect the human mind to be comprised of parsimonious systems; ones that can do a lot, with a little.

The second factor driving the siloing of psychological processes by stimuli type is that there are professional incentives for doing so. That is, not only is it intuitively appealing to posit particular psychological processes that correspond to particular perceptual, attitudinal, and behavioural outcomes, but there are also rewards for researchers who take such an approach. In a scientific field that can appear to prioritise research novelty above all else (Appley, 1990; Berkowitz & Devine, 1989; Staats, 1983, 1999), positing new processes for different stimuli becomes a kind of inexhaustible well. The formula is straight forward: First take some observed perceptual outcome to do with a particular type of stimuli that has been yet to receive the explicit attention in your research tradition, outcome Y. Second, identify an existing psychological model that could similarly explain

outcome Y, model X. Third and finally, appropriate model X, rebranding it as model Y to achieve a novel, and therefore likely publishable, psychological account of outcome Y. The alternative, of course, is simply to make the observation that model X can also accommodate outcome Y, but that does not grant us the sort of new psychological model that seems to be attractive to journals. Nor would it be as helpful to researchers looking to make a name for themselves as area experts. To continue the hypothetical, if researchers suggest that model X is a suitable explanation for both outcomes X and Y then the 'go to' authority for those who are interested in outcome Y will be the author(s) of model X; the researchers who connected model X to outcome Y may well find themselves cut out of the loop. In contrast, if researchers propose model Y then it is *their name* that gets attached to the "original" explanatory model of outcome Y. This can grant the dual benefits of an increased public profile, if model Y becomes a matter of public interest, as well as an improved citation record, the latter of which being particularly important to advancing one's academic career. A psychology segmented on the basis of stimuli type is also a convenience to researchers in that it reduces the burden on researchers to keep up with developments being made elsewhere; a burden that is made substantial by the enormous, and rapidly growing, psychological research literature (Bransombe & Spears, 2001). Siloing research on the basis of stimuli insulates one's own field of interest from the impetus toward integration and to advance psychology as a coherent whole. Jacoby (1983) captures this benefit to researchers nicely, making the observation within his own area of inquiry, memory processes:

The strategy of postulating different memory stores or dichotomies in processing is in many ways a tempting one. The apparent complexity of

problems, can, thereby, be reduced along with the portion of the voluminous literature on human memory and performance that one is held responsible for knowing. (Jacoby, 1983, p. 37)

In sum there are three ways in which researchers are rewarded for developing a fragmented psychology and establishing isolated research streams. First, it generates ostensive novelty; second, it gives researchers something that they can put their names to; and third, it makes it easier to keep research current, or rather it reduces the expectation that integration with other contemporary research will occur. It should not be surprising then that in social psychology a tendency toward segmentation has, to some degree, become institutionalised. Indeed, in a 2010 southern hemisphere conference one member of the field, who shall remain anonymous, was heard to lament that social psychology has in place a “theory proliferation treaty”, meaning that researchers allow each other ample space to develop their own theoretical fiefdoms. In other words, there is an “acceptance of redundancy” (Staats, 1999, p. 7; see also Staats, 1991) where psychological research is insulated from accusations of disconnection, or even incompatibility, with other related work.

There are, of course, costs. Jacoby (1983) continues, “these gains carry the price of ignoring similarities between problems and theoretical developments in different areas.” (1983, p. 37). Said otherwise, a social psychology that defaults toward segmentation risks slowing the rate of overall research progress by slowing the rate at which advances in one line of research permeate psychology more broadly. The “non-cumulative character of much social psychological research” (Tajfel, 1981, p. 152) can be discussed in the context of transference in social psychology, and our position is that transference has been subject to exactly

this kind of delayed progression. The fact of the matter is that the vast majority of the points we will make in Chapter 5 could have been made twenty years ago.

Looking solely at SCT, the tenets of SCT were laid down in the mid-1980s, with much of the groundwork for that theory conducted over the 1960s and 1970s. By the mid-1990s these tenets had been subjected to targeted testing and the messages of the social identity approach had been refined and polished. These messages, however, were not applied to the social psychology of transference. It was instead argued that because these messages related to categorisation processes they fell outside of the domain of transference, which was argued to be not underpinned by a process of social categorisation. How was this argued?

Primarily on the basis of stimuli type. For transference researchers the process of categorisation was understood to be the process of perceiving the world through sociological categories, a particular type of social stimuli; thus transference, because it does not directly involve sociological categories and instead involves individuals, is underpinned by something else. This is par-for-the-course theorising in social psychology; building distinctions among psychological processes based on the intuitive presumption that the way we symbolically structure our environment is an outcome of cognitive systems that mirror that structure.

It might be said that by labouring on these particular research trends in social psychology that we are looking a gift horse in the mouth. In fact, another approach we may have taken is to maintain the transference process versus categorisation process distinction, and instead bring across insights from the social identity approach to transference in a piecemeal fashion; augmenting the social cognitive model of transference here and there with certain isolated facets drawn

from SCT. Our suspicion is, however, that such an approach would quickly become tied up in knots. For one, we would have to tip toe around the fact that a central message of the social identity approach is that all social perception is an outcome of social categorisation; we would need to maintain a distinction that is anathema to that point. Second, there is every chance that our contributions would be undermined by that individual processes versus group processes divide that is entrenched in the transference literature. By this we mean that attempts to add categorisation based notions to the social cognitive model of transference (e.g., comparative fit) may be interrupted by a rebuttal along the lines of “these processes may work for categories but cannot be applied to individuals, which is the concern of transference”. No, better we think to tackle the overabundance of stimuli based process distinctions in psychology head on. Hence our decision to dedicate this chapter section to explaining, and then unravelling, the presumption in the transference literature that a transference process must be intrinsically disconnected from social categorisation processes.

To conclude this chapter section then, the social psychology of transference has distanced itself from research on social categorisation processes. This has been largely based on the argument that categorisation processes are not directly relevant to transference because transference concerns individuals and not collections of individuals. This argument, however, is based on the premise that categorisation ideas are only useful for explaining the influence of sociological categories on social perception. This premise, however, is unsubstantiated, and follows from certain attractive intuitions about human cognition, as well as institutionalised enticements for researchers to posit specific psychological processes for difference types of stimuli. Instead, as per the social identity

approach, categorisation processes should be understood as underpinning all social perception, regardless of whether the stimuli are collections of individuals, individuals, or even parts of individuals.

The social identity approach versus itself

Thus far we have attributed the absence of social identity ideas from the social psychology of transference to a) the rivalry and metatheoretical incompatibility between the social identity approach and the social cognition approach, and b) a common but spurious argument that social categorisation processes, of which the social identity approach is chiefly concerned, cannot explain phenomenon not pertaining to collections of individuals. In order to fully understand the absence of social identity ideas from the transference literature, however, there is one more area that should be given our attention: we should pay heed to the barriers that the social identity approach has unintentionally created for itself.

The challenge of version control

For starters, what is the social identity approach anyway? Unfortunately for those looking to familiarise themselves with the social identity approach, there are a number of different answers to this question, each with different implications for how one understands the messages of the social identity approach. One such answer is that the social identity approach is a loose collection of theorising about our social selves and the roles that our group memberships have in guiding our sense of self and our social behaviour. From this perspective social identity approach is a massive accumulation of ongoing research. This version includes under its banner any and all extensions of the early ideas, including for instance Hogg and colleagues' subsequent uncertainty reduction perspective (Hogg &

Williams, 2000), as well as other social psychological theories dealing with social selves, such as optimal distinctiveness theory (Brewer & Gaertner, 2001). Of course, the breadth of what is included in this social identity approach makes it largely impenetrable. It becomes a vast assortment of extensions, developments, and complementary theories, often incompatible with one another.

Another common answer is that the social identity approach is chiefly SIT, which brings with it other challenges for those fresh to this body of work. Here authors may leverage SCT concepts such as comparative fit, level of abstraction, or social identity salience, but the source given is either Tajfel and Turner's (1979) statement of SIT, or Tajfel's edited volume *Differentiation Between Social Groups* (1978a). This means that a researcher looking for further information on these ideas will only find them absent from the supposed source material. Take the arbitrarily selected and not at all unusual example of Ryan (1995) who writes "according to social identity theory... individuals accentuate between-groups differences and within-group similarities to strengthen their social identity" (p. 194). Ignoring for the moment the fact that neither SIT nor SCT make this exact claim, here the author is leveraging the SCT concept of accentuation and then attributing that concept to SIT (for similar examples see Lobel & St. Clair, 1992; Terry & O'Brien, 2001). Where in SIT is the accentuation principle? Nowhere. What then do interested parties do when faced with this quandary? Frankly, our suspicion is that they assume that social identity theorists are making it up as they go along. Or, alternatively, they come to the same conclusion as in our first answer: that the social identity approach represents only a loose collection of theorising about our social selves.

There are numerous other answers to the question ‘what is the social identity approach?’, and on top of the misunderstanding that any one particular account may cause⁵, merely the fact that there is dissensus is enough to generate substantial confusion among those looking to familiarise themselves with the literature. The broad point is that social identity theorists have, to a sizeable extent, lost control of the narrative of what the social identity approach is. The result is an extensive body of literature that is a real challenge to navigate⁶. Moreover, while this can be partly attributed to failures in scholarship, the truth of the matter is that social identity authors have scored a number of own goals in this area.

To begin with, the unwieldy nature of the social identity literature can be partly attributed to some ostensibly innocuous language choices in the earliest social identity publications. Even something as simple as the naming conventions for the theories has proved to be fraught. For example, although Turner has since railed against the practice of lumping SIT and SCT under the banner of the former (Turner, 1999b; Turner & Reynolds, 2001), he was among those who helped set the precedent early on (Turner, 1987a, 1988). Similarly, Turner gave SCT the alternative title “*the social identity theory of the group*” (1987b, p. 42). While at the time this terminology would have seemed elucidating as to the explanatory domains of the two theories, with twenty-twenty hindsight this looks obvious as a potential source of confusion. In fact, that naming convention was identified by Turner as a potential difficulty, but he did not at that time seem to anticipate the potential scale of the problem: “It is unfortunate in some ways that two such closely related theories should have similar names, but also useful and

understandable in terms of their origin, and now in any case the labels seem irretrievably to have stuck” (Turner, 1987b, p. 43).

The language used by social identity theorists around “theoretical development” is also relevant here. Specifically, language that describes SIT, SCT, or the social identity approach overall, as a *work in progress* (e.g., Turner, 1988, 2001b; Turner et al., 2006) has proved a hindrance to maintaining control of what is canonical to the social identity approach and what is not. Such language, which has been regularly adopted by others publishing in the area (e.g., Haslam & Ellemers, 2005; Hogg, 2005; Hogg & Williams, 2000; Hornsey, 2008; Rubin & Hewstone, 2004; Terry, Carey, & Callan, 2001), is attractive in that it grants theorists scope to update their theories as new information becomes available or in recognition of advances in theorising elsewhere, which in turn helps maintain relevance. However, a problem is that it technically grants that same scope to anyone. In other words, if SIT and SCT are *living documents*, then who gets to make the definitive statement of either theory? Hogg and colleagues’ uncertainty reduction perspective, mentioned above, is a good example of how this quickly becomes a major challenge. Hogg, a one time student to Turner, has theorised with colleagues that one of the reasons that people develop inclusive social identities is to reduce feelings of subjective uncertainty (M. A Hogg & Mullin, 1999). This theorising has been described as part of the social identity approach, and SCT more specifically (Hogg & Williams, 2000). Elsewhere, however, this uncertainty-identity theorising has been argued to conflict with the tenets of SCT that speak to the *uncertainty generating* capacity of inclusive social identities (McGarty, 1999). The most obvious question this raises is “who is correct?”, but it also raises a second question: If SCT is a work in progress, whose account of SCT is the “true” SCT? It is

this second question that serves to confuse the literature. Indeed, while the former might be resolved through further theoretical scrutiny and empirical activity, given the precedent set by Turner and others, the latter may be unanswerable.

To give another example, this time to do with SIT, in the late 1980s two empirical predictions were made that were said to be derived from that theory. These were that a) acts of intergroup discrimination should result in elevated self-esteem, and b) that people with initially depressed self-esteem should engage in more frequent or intense acts of intergroup discrimination (Abrams & Hogg, 1988, 1990; see also R. Brown, 2000). These were argued to be two corollaries to what was described as SIT's more general self-esteem hypothesis, where an individual's self-esteem is straight forwardly connected to the positive differentiation of one's social identity from outgroups (see also Hogg & Abrams, 1988). Here too, whether this is actually a part of SIT is contested. It has been argued elsewhere that a straight forward self-esteem hypothesis has never been part of the theory (Long & Spears, 1997; Martiny & Rubin, 2016; Rubin & Hewstone, 2004), and further that the self-esteem hypothesis is actually incompatible with the tenets of SIT (Ellemers & Barreto, 2001; Turner, 1999a; Turner & Oakes, 1997; Turner & Reynolds, 2001; but see Oakes & Turner, 1980). How does this get resolved? The instinctive solution is to point people to the original sources, as indeed became a mantra of Turner as contention around the content of the social identity approach persisted and grew (1999a). However, if the social identity approach is a developing phenomenon then that ship may well have sailed. It may be argued that, regardless of whether the self-esteem hypothesis is explicitly laid out in SIT, it can be connected to the theory and therefore included under the banner of SIT as an update of that theory. And "updates" there have certainly been. Numerous

researchers appear to have been keen to attach themselves and their theorising to this body of research; it is now par-for-the-course to see either SIT, SCT, or the social identity approach attributed to a wide variety of authors (e.g., Barnum & Markovsky, 2007; Hogg & Abrams, 1999; Struch & Schwartz, 1989; Triandis & Trafimow, 2001).

This version propagation issue means that researchers now have the luxury of cherry picking which social identity approach, or which components of the social identity approach, they wish to engage with. This can be incredibly convenient, particularly for those looking to take a critical perspective. There is now a plethora of low hanging fruit that can be used as examples where “the social identity approach” has been found to come up short. This adds another layer of complexity for new players. Not only are researchers likely to find the social identity approach introduced as a number of different things, they are also likely to find that the social identity approach is now simultaneously regarded in social psychology as a well-supported source of insight and practical understanding *and* a largely disproved but nonetheless interesting aspect of the social psychology’s history (e.g., Operario & Fiske, 1999).

Out with the old

One might, based on the above, get the impression that these barriers have arisen disproportionately to the causes. The profound disorganisation of the social identity literature appears to have stemmed from very minor terminology choices on the part of social identity theorists, as well as a handful of remarks about the opportunity for future theoretical development. One might also get the impression that these otherwise innocuous, idiosyncrasies of the social identity literature have been unfairly exploited; either with the intention to bolster one’s own social

identity credentials, or alternatively as a way of maligning and marginalising this body of work. There is another component at play here, however; one that makes the experienced disorder of the social identity literature much more reasonably tied to the actions of social identity theorists. Here we refer to the reluctance on the part of social identity theorists to correct, criticise, or dispute parts of the social identity message or chapters in the social identity story. In other words, the architects of the social identity approach appear to have been somewhat reticent to address some of the inconsistencies within the approach. This has created a scholarly void of sorts, and in our assessment it is this void that has given others the opportunity necessary to broadcast their own reinterpretations, misinterpretations, and to generate confusion generally.

We can begin illustrating what we mean here by looking back to our own introduction of the social identity approach in Chapter 3. There, in the course of introducing SCT's account of social categorisation, we made mention of three addendums to the theory. The first related to person level social categorisations and the level of abstraction principle. Here the early linkage between person level categorisation and personality has been tempered and the range of social category exclusivity has been expanded to include categorisation at the intraperson level. Next was the move away from viewing social categories as hierarchically organised as a matter of course, with hierarchies instead being considered one of any number of possible organising structures. The third and final addendum was the move away from the concept of relative accessibility and toward the similar but nonetheless different concept of perceiver readiness, along with the corresponding adoption of an online social category formation understanding salience. Importantly, none of these three points are original theoretical assertions of ours.

They instead capture the laudable work of social identity theorists that largely took place across the 1990s, likely representing exactly the kind of “developments” that Turner and colleagues broadly anticipated. Critically, however, in two of these three examples their status as developments is something that is not made clear. When it comes to the progression of thinking around person level categorisation, as well as the shift toward perceiver readiness and emphasis on online category formation, these are instead presented as if they have patently always been components of SCT (e.g., Oakes et al., 1994; Turner et al., 1994; Turner & Onorato, 1999; McGarty’s critique of category hierarchies is the exception, where the assertions are clearly communicated as counter to the tenets of SCT). The advantage of such a presentation, of course, is that it maintains the impression in the first instance that the social identity approach, and SCT in particular on this occasion, has *always had* the capability to be wielded in whatever way is occurring at present. Unfortunately, in our assessment this isn’t really the case. While it may be reasonably said that SIT and SCT have always had the *potential* for such applications and insights, a number of the contemporary uses of these theories cannot be derived from what was originally penned. In other words, to get us to where we are now SIT and SCT require an explicit update, which is not something that the architects of the social identity approach have provided.

Similar challenges arise when it comes to the relationship between SIT and SCT. Although there are a number of statements that suggest that SIT and SCT go hand in hand (Haslam, 2001; Hogg & Abrams, 1988; Postmes & Branscombe, 2010; Turner, 1999a), these are often short on detail when it comes to exactly how the two theories go together. The fact of the matter is that combining the two theories is not a simple matter and there are points at which SIT and SCT are essentially

incompatible. 'What is identity?' is a good example of this. In the social identity literature the question of individual identity is squarely outside the scope of the theory. Tajfel was adamant that the contribution of SIT to understanding intergroup relationships should not be lost in what he felt would likely be "endless and often sterile discussions as to what "is" identity" (Tajfel, 1978c, p. 63). Thus, an individual's *social identity* was limited to "that *part* of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups)" (p. 63, emphasis in original). The remainder of the self-concept was cordoned off as a question for another time and another theory; a person's, social identity, singular, was only one small part of an otherwise complex and still mysterious identity system, where the focus instead was the implications for intergroup relationships. For SCT, in contrast, the question of identity was a chief concern. Indeed, SCT tackled the nature of the self-head on, laying down a conceptualisation of the self as a cognitive structure that constructs and maintains our *self-images* through, *inter alia*, the process of self-categorisation. An implication of this is that "social identity" takes on a very different meaning to the one it has in SIT. In SCT our social identities, plural, are self-representations that are central to the self.

In the end we are left with a critical question: in a combination of SIT and SCT, what is a social identity? Our view is that the most useful approach is to adopt SCT's concept of social identity, essentially replacing the one provided in SIT. This is also the approach taken by many social identity researchers, and it might therefore be tempting to say that this is the obvious reconciliation. Really though, it is not obvious, and there are good reasons that one might think that SIT's definition of social identity is the one that should be retained, not least of which

being that SIT got there first. The result has been substantial inconsistency in the way in which SIT and SCT are brought together, which again fuels confusion for those unfamiliar with the history and detail of these two theories. It has become clear that if a combination of SIT and SCT is to be consistent and generally accessible then detailed guidance around how to combine the two theories is required. Some statements along these lines have been made available (Haslam, 2001; Reynolds & Turner, 2012; Turner, 1999a; Turner & Reynolds, 2001), however, they are few in number and are potentially too late to the party; a manual for transitioning between SIT and SCT was potentially needed as soon as SCT was developed. Of course, such a manual would have involved a concerted explication of the limitations of SIT, which presumably would have at the time been unappealing for those who harboured such respect for that theory.

Deep seated feelings of respect may be a contributing factor in another area in which social identity theorists have been seemingly unenthusiastic to point out where thinking has moved on, this time at the metatheoretical level. As we have seen above, the social identity approach embraces a social constructionist metatheory, where all meaning is an outcome of cognitive categorisation, which is simultaneously informed by the experienced stimuli and the vantage point of the perceiver (i.e., their beliefs, ideas, and theories, as well present goals). The converse is the objectivist metatheory, where meaning is always “there” in the stimuli. In terms of cognitive categorisation, we have seen how this alternative metatheoretical perspective has led researchers in social psychology to conclude that the categorisation serves a *meaning reduction* purpose. That is, we categorise stimuli in order to simplify perception so that we can engage with our environment without exhausting our information processing capacities. Indeed,

this is often where the social constructionist versus objectivist antagonism is played out, with social identity theorists seeking to dismantle the thesis that *cognitive categorisation equals simplification*. In the course of making this argument, connections are generally made with Bruner's work on categorisation, as well as Tajfel's theories on categorisation and cognitive accentuation that predate his work on SIT and the minimal group paradigm (see Chapter 3). The latter connection, however, is problematic. The reason being that Tajfel also regularly took the position that categorisation serves a simplification function (Tajfel, 1974, 1978c, 1978d, 1981), as well as at least once intimating that individual difference is the gold standard for social perception (Tajfel, 1978b). Those reading into the social identity approach are therefore recipients of a thoroughly mixed message. On the one hand they are asked to turn away from the mainstream belief, both within social psychology and elsewhere, that social categorisation results in information loss; while on the other hand great importance is placed on the pioneering work of Tajfel, also a key architect of the social identity approach, who from time to time affirms that exact conventional wisdom. The result is that the social constructionist message of the social identity approach risks being undermined. Yet, despite this, the contradiction between Tajfel's writing on the cognitive function of categorisation and the later social identity literature is almost always passed over. Further, the few occasions where this important departure from Tajfel's writing is made clear (Haslam & Turner, 1992; Oakes et al., 1994; McGarty, 2002) are approximately equal in number to occasions where Tajfel is selectively drawn upon and the impression is given that the metatheory has been consistent all along (e.g., Oakes & Turner, 1990; Reynolds, Turner, & Haslam, 2000)⁷. That latter portrayal isn't without some basis,

particularly in light of Tajfel's arguments around the perceptual acuity function of accentuation (e.g., 1957), but without also acknowledging where the social identity approach has moved away from Tajfel's perceptive such a portrayal leaves one with a slight aftertaste of revisionism. Of course, Tajfel was a giant in the field of intergroup relations and across social psychology in general; so much so that it has been suggested that there exists a "Tajfel Effect", where theoretical debate and progression is stifled by the moral and rhetorical weight of Tajfel as a personal figure (S. D. Brown & Lunt, 2002). We would not necessarily go that far, but we do wonder if a degree of admiration and reverence has led social identity theorists to play down their metatheoretical critique of Tajfel's work.

Overall, the above features of the social identity story suggest that the architects of the social identity approach have had limited motivation to provide explicit theoretical updates for those seeking to engage with that approach. Instead, as thinking has moved on within the approach, with various tenets discarded or replaced, the standard has been to introduce these simply *as the social identity approach* without flagging developments as developments for the reader. Really though, the issue of motivation is immaterial for our present purposes. Rather, it is the outcome that is relevant here: social identity theorists have been quiet when it comes to updates despite having themselves made a number of key theoretical developments in the years between and after the publication of SIT and SCT; developments that require a departure from the theories' tenets as written. In isolation the absence of such periodic updates may not have been an issue, and the issue of communicating the messages of the social identity approach could still have been reasonably straight forward. We, for instance, have in Chapter 3 treated SIT and SCT to be exactly as has been originally

written (see also Haslam, 2014), choosing to augment those theories explicitly where required. Alternatively, one might choose to declare a more contemporary statement to be the updated theory, as did McGarty in his review of SCT: “I will assume that what SCT *is* is whatever Turner maintains it to be in his most recent writings on the topic” (1999, p. 110, emphasis in original). This also works quite well so long as you are clear on which more recent sources are being leveraged and that there has been a departure from the original sources, as was McGarty. As we have seen, however, the social identity approach sails in treacherous waters; waters filled with researchers keen to add their own name to social identity approach, as well as those far from motivated to portray the social identity approach in the best possible light.

Pulling all of the above together, the social identity literature has become somewhat of a quagmire due to a perfect storm of sorts. While some confusion may have innocently arisen due to some early trivial nomenclature choices, this confusion has been compounded by a degree of opportunism exhibited by those publishing this research space, which has been empowered by the absence of clear and incontrovertible messages from the architects of social identity about what should be understood as the *current social identity approach*.

Our point is not, however, that the social identity approach faces unique challenges in this regard, or that the social identity approach is comparably worse off than other social psychological theories. Sidanius, Devereux, and Pratto (2001), for example, describe substantial difficulty in navigating the *symbolic racism* literature due to the tendency for theorists, including the key architects of that approach, to describe symbolic racism in different ways across publications. Meanwhile, Sidanius and colleagues’ own theory, social dominance theory, has

been described as undergoing undocumented revisions; revisions that alter the fundamental tenets of that approach (Rubin & Hewstone, 2004).

Nevertheless, it is the case the social identity literature is vast and regularly inconsistent. Consequently, it is often impenetrable for newcomers. This no doubt has made it difficult to see opportunities to apply the social identity approach to transference, and indeed has limited its appeal more generally.

Summary

The role of this chapter has not been to provide context for context sake. Instead it is hoped that, by taking the time to explain why a concerted SCT based account of transference has been such a long time coming, we might head off certain areas of confusion before they arise. Neither the social constructionist metatheory of the social identity approach, nor a conceptualisation of cognitive categorisation as a ubiquitous perceptual process, can be considered to be rudimentary notions; more often than not both take some time to get one's head around. Thus, should we have launched straight into description of our SCT derived model, the risk would have been that the model would be rejected on the basis that it violates one or a number of expectations for what a social psychological model of transference should look like. With some luck this chapter has served to mitigate this risk. By explicating these ideas fully, the anticipation is that an unfamiliar reader will be better placed to understand the assumptions that underpin a social identity based model of transference, and the form that model takes. Here we follow a similar point made by Turner and Reynolds in the context of collective psychology: "Understanding the metatheory of social identity is not a luxury; it is a crucial part of its legacy and a prerequisite for the full development

of social psychology's analysis of intergroup relations and human social conflict" (2001, p. 149).

By the same token, by making an issue of the confusion surrounding what the social identity approach does and does not entail, the hope is that any misconceptions about the theoretical approach that we are drawing from might be allayed. In sum, the foremost aim of this chapter has been to establish a firm foundation from which an SCT based model of transference may be understood. Having attempted this to the best of our abilities, we can now turn to the task of laying out that model.

Notes

1. A more succinct definition for metatheory is that it is "collection of related underlying themes that together represent the dominant explanatory approach" (Turner, 2001a). Even more pithy, Tajfel describes a particular theory's metatheory as the "kind of theory it is or the approach to the problem that it represents" (Tajfel, 1978b, p. 435).

2. Interestingly, despite adopting an objectivist standpoint in their continuum model of impression formation, Fiske and Neuberg (1990) also pay a moments respect to Allport's clearly social constructionist statement that "open-mindedness is considered to be a virtue, but strictly speaking it cannot occur. A new experience *must* be redacted into old categories." (1954, p. 20, emphasis in original). Allport himself introduces Bertrand Russell's more pithy statement on this topic: "A mind perpetually open will be a mind perpetually vacant" (cf. McGarty, 1999).

3. To give a straight forward example of objectivism in action in social psychology, Lee and Duenas define stereotype accuracy as “the correspondence between perceived cultural difference and objective cultural difference” (1995, p. 163). The contrast between social constructionism and objectivism is similar to what is elsewhere described as the difference between *sortalism* and *antisortalism* approaches to cognition and perception (Blok, Newman, & Rips, 2005).

4. Social psychology, including the social cognition approach, has received criticism from social identity theorists for being individualistic in a second sense of the term. They reproach the field for severing individual cognitive processes from the social and societal context in which they are situated and then focusing solely on the former (Oakes et al., 1999; Oakes & Turner, 1986a; Spears, Oakes, Ellemers, & Haslam, 1997; Turner & Oakes, 1986; Turner, Reynolds, & Subasic, 2008). The result being a social psychology that fails to adequately address the critical and inextricable connections between individual perception and social reality.

5. One eyebrow raising account of the social identity approach has been that SCT was developed largely in an effort to correct SIT (Operario & Fiske, 1999).

6. Irrespective of issues of narrative control, Postmes and Branscombe describe the social identity literature as “unusually fragmented” (2010, p. 2) with core publications across a wide range of books and journals, spanning decades. This no doubt also contributes to the confusion as to what the social identity approach entails.

7. It is also not unheard for social identity theorists to stray into an objectivist standpoint themselves. Hogg and Abram's introductory text to the social identity approach (1988), for example, adopted the same distortion and simplification misinterpretation of Bruner's categorisation message as is common to the social cognition literature. This, with its endorsement from Turner in the forward, is an even more straight forward source of inconsistency.

CHAPTER 5

THE SOCIAL CATEGORISATION MODEL OF TRANSFERENCE

In the first section of this chapter we propose the SCT based social categorisation model of transference. This model is founded on the theorising of the social identity approach, and in particular SCT, which was introduced in Chapter 3. Briefly stated, the social categorisation model of transference is one where transference is the accentuation of within class distances for a salient SO and target social category, where the salience of a SO and target category is an outcome of an online category formation process, which always entails an interaction between perceiver readiness and comparative and normative fit. In the course of introducing this model of transference we will show that it is easily able to account for the wide array of findings in the transference literature. This includes the classic transference effect, whereby SO characteristics are misremembered as present in a newly encountered target, as well as the transfer of additional SO content (e.g., affect, interpersonal motivations, patterns of interaction).

After detailing the social categorisation model of transference, we will then explore some of the immediate implications of the model. This exploration will be structured in terms of three areas of the social cognitive model of transference that were identified in Chapter 3 as posing theoretical challenges: similarity based cueing, SO representation storage, and SO representation application. In terms of the first, we move past similarity as a problematic theorised antecedent of

transference, replacing it with the more coherent perceiver readiness and comparative and normative fit interaction. Next, we move away from stored SO representations as an initially intuitive but none-the-less implausible aspect of the social cognitive model of transference, turning instead toward an online category formation model, underpinned by neurologically plausible connectionist theorising. Finally, in terms of SO representation application, some further implications of an online category formation model for impression formation will be made explicit; by rejecting an application and activation model of cognition we are no longer compelled to seek out some cognitive entity for information to be applied to. Instead, sensory input may be thought of as inextricably tied up in the representation formation process, just as are the background knowledge, beliefs, and expectations of perceivers.

We conclude the chapter by outlining the general approach taken in this thesis to generating empirical support for the proposed social categorisation model of transference.

The model

In the present model, transference is an outcome of a social categorisation process. More specifically, the observed phenomenon of transference, where SO characteristics come to be perceived as present in another person, is an outcome of the accentuation effects that arise when social categorisation schemes become salient. Accentuation effects, as you will remember from Chapter 3, encompass the cognitive accentuation of the precognized distances between classes and the precognized stimuli distances within classes. We posit that transference is the accentuation of within class distances for a salient social category that encompasses a perceiver's SO and a newly encountered target person.

A salient social category that encompasses a SO and a newly encountered target can be given the label *SO and target*, straightforwardly reflecting those whom the category includes. This is a dyadic categorisation scheme, but the issue of how many individual people are included within the bounds of the social category is inconsequential. In terms of describing the cognitive process at play in transference we can simply state that social categories are cognitive class structures that are not limited in terms of their level of inclusiveness. Nor are social categories limited in terms of the type of stimuli that they encompass (see Chapter 4, where we explored the tendency in social psychology to confound social categorisation with sociological social categories).

Accentuation within SO and target social categories

Looking more closely at the accentuation of within class distances for a SO and target category, the application of the accentuation principle to the phenomenon of transference parallels the use of the same principle to explain observed increases in perceived characteristic concordance in the context of social groups (e.g., Haslam & Turner, 1995; Hogg & Turner, 1987a). Specifically, the presence of a salient SO and target category may be expected to cause perceivers to understand the SO and target to be conceptually close. It is this conceptual closeness that is then accentuated via the perception that a greater number of SO characteristics are also shared by the target, thus accounting for the classic transference finding that SO characteristics come to be experienced by perceivers as also present in newly encountered targets. We can also think about this in terms of an increase in the cognitive interchangeability between the SO and the target. In other words, the salience of the SO and target category makes it perceptually

irrelevant as to which individual possesses what particular characteristics, thus SO characteristics are diffused generally within that category¹.

This does, of course, raise the possibility of accentuation in the other direction: from the newly encountered target to the SO. That is, and again as a function of accentuation of conceptual closeness, we might expect characteristics of the target to come to be seen in the SO. To our knowledge such an effect has never been tested for, so we cannot say on the basis of empirical observation whether it occurs or not. This issue of characteristic diffusion direction has been raised in the context of self-categorisation, and a number of researchers have concerned themselves with whether inclusive self-categorisation results more in *self-anchoring* or *self-stereotyping* (e.g., Ames, 2004; Cadinu & Rothbart, 1996; Krueger, 2007; Otten & Epstude, 2006; Veelen, Otten, & Hansen, 2013); self-anchoring, or *social projection*, being the perception of other ingroup members on the basis of self characteristics², and self-stereotyping being the perception of the self on the basis of fellow ingroup member characteristics. We need not spend much time on the question of diffusion direction here; whether accentuation occurs from the target to the SO or not, does not change the fact that intraclass accentuation fits as a cognitive mechanism for transference. However, it is worth pointing out that from the perspective of SCT the underlying mechanism for accentuation is not inferences made from certain category members to other category members. Instead, the mechanism is actually inferences made from the inclusive self-category itself (Onorato & Turner, 2004; see also Turner, 1982), where the content of that self-category is informed to varying degrees by the characteristics of all class members (see also Veelen et al., 2013).

Applying this to SO and target categories, this would suggest that inferences are really made about both the SO and newly encountered target on the basis of the inclusive SO and target category, with the category content informed by the characteristics of members as they are available. Consequently, we would not be surprised to find asymmetries in the accentuation of characteristics between a SO and a target; this is because little is known about newly encountered targets in comparison with the well known SOs, meaning that there isn't much opportunity for the observations targets to inform SO and target categories. To give a crude illustration, if we only observe that a newly encountered target is bold and brave, whereas we know our SO to be cheerful, clever, cunning and careful, then there is more opportunity to use SO characteristics to inform the SO and target category; the maximum quantity of characteristics sourced from the target is two and the maximum sourced from the SO is four.

SO and target social categories and multiple social categorisation

In the social categorisation model of transference it is anticipated that SO and target categories will become salient concurrently with other social categorisation schemes. This reflects the expectation that social perception will always be informed by numerous social categorisation schemes, many of which may be subsumed within, or cross-cut, each other. Flagging the existence of simultaneously salient cross-cutting social categorisation schemes is important for maintaining the plausibility of a categorisation based account of transference. As we have seen in Chapter 2, one of the reasons that a categorisation based account of transference was originally ruled out was that shared category memberships for the SOs and targets were expected to result in difficulty distinguishing a target from a SO (Andersen & Glassman, 1996). By recognising the existence of cross-

cutting categories this need not be the case. Instead, accentuation of the intraclass distances between a SO and a new target may be expected to impact perception as one of a myriad of categorisation based accentuation effects. In particular, co-occurring categorisation of both a SO and a target as distinct individuals will allow a perceiver to easily navigate who is who while transference is in operation. This again parallels the expectations for accentuation effects in the context of social groups; categorisation on the basis of SO and target does not prevent a perceiver from identifying that the new person is not actually their SO in just the same way as categorising and stereotyping people as American does not prevent a perceiver from also distinguishing between different Americans.

Our emphasis on simultaneous social categorisation may be surprising to some readers. This is because SCT is often construed as positing that social categories are strictly *functionally antagonistic*, meaning that only one social category may ever be salient at any one time and that the salience of one social category inhibits the salience of others (e.g., Hornsey, 2008; Lobel & St. Clair, 1992; Rink & Ellemers, 2007). This, however, is a misinterpretation of SCT's stated position. SCT instead has always anticipated that social perception would be underpinned by multiple categorisations. Speaking to the topic of personal and group categorisation schemes, Turner writes: "Personal and ingroup-outgroup categorisations, then, are not mutually exclusive. On the contrary, they probably operate simultaneously most of the time, but their perpetual effects are inversely related" (1985, p. 99; see also Turner et al., 1994). What the principle of functional antagonism does anticipate is that broadly speaking there is predictive utility in expecting the behaviour stemming from a particular self-category to be curbed by an increase in the salience of an alternative self-categorisation scheme. Functional

antagonism was a cognitive explanation of SIT's interpersonal-intergroup behavioural continuum, not a strong statement about the *detail* of cognitive categorisation processes (Turner et al., 2006; cf. Jetten & Postmes, 2006). It is therefore consistent with SCT to posit a model of transference where a salient SO and target categorisation scheme, acting amongst other salient categorisation schemes, leads to the accentuation of within class distances, manifesting as an increase in the degree to which SO characteristics are perceived as also shared by a newly encountered target, without inhibiting the ability to recognise that the two category members are indeed different people.

The content of SO and target social categories

Looking beyond the transfer of SO characteristics, where characteristics are thought of primarily as semantic descriptors, what we have articulated thus far also accounts well for the transfer of other types of SO content. For example, the transference of the affect associated with a SO can also be understood as an outcome of accentuation effects (Andersen & Baum, 1994; Andersen et al., 1996), so long as affective tone is viewed as in some way tied to our memories of SOs in the same way that a quality, trait, or mannerism might be. The same can be said of the transfer of interpersonal motivations and patterns of interaction (Andersen et al., 1996; Baum & Andersen, 1999; Berenson & Andersen, 2006; Berk & Andersen, 2008; Brumbaugh & Fraley, 2006; Hinkley & Andersen, 1996). These could either be explained directly as a function of a diffusion of interpersonal scripts associated with our SOs to newly encountered targets (e.g., the target is the same as my SO in that they are the kind of person that I approach), or more indirectly as a response to newly encountered people that have become imbued with SO characteristics

that evoke particular interpersonal responses from us (e.g., I can safely approach the target *because* they are the same as my SO).

It is notable that all of the above can be accounted for without positing any *additional* cognitive mechanisms. This is a key point of difference with the social cognitive model of transference, which posits additional processing features in order to account for the transference phenomenon. The most obvious additional feature is the suggestion that transference is underpinned by the existence of specific SO representations, which are special in their accessibility, clarity, and n-of-one status. A less obvious additional feature is the social cognitive model's activation and application model *in general*, which although ubiquitous to the social cognition approach, is additional because it is argued to be an alternative to bottom up social perceptual processes. Our account of transference in contrast, following the social identity approach and SCT, relies on a singular process underpinning social perception that is necessarily both stimuli and perceiver driven; a categorisation based approach may be described as particularly parsimonious for this reason.

Constraints on SO and target social categories

Having identified the cognitive mechanism that may be said to underpin transference, we can now turn to the matter of the predictors of transference. In short, when can we expect transference to occur and when not? Based on the above we can put this question in cognitive terms; because transference is said to be underpinned by the accentuation effects that arise from a salient SO and target category, we can rephrase this question as, when will a SO and target category become salient? From here the answer then follows naturally: the salience of a SO and target category will be predicted by the same thing that predicts the salience

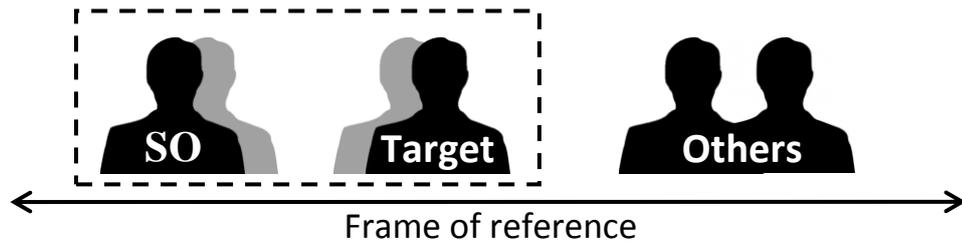
of any social category, the interaction between perceiver readiness and comparative and normative fit.

To recap from Chapter 3, perceiver readiness encompasses the perceiver's past experience, present expectations, current motives, values, goals, and needs; it is what the perceiver brings to the perceptual process. This may be contrasted with fit, which is largely stimuli centric and has two components. One is comparative fit, which is determined by the principle of metacontrast; stimuli are likely to be categorised together to the degree that the average precognized distances between those stimuli are perceived as less than the average precognized distances between them and the remaining stimuli in the frame of reference. The other is normative fit, which refers to the role of stimulus content in constraining the formation of the salient category. For example, although comparative fit may indicate a line of demarcation between social stimuli (e.g., two groups of people), normative fit still plays a role in embedding that demarcation with meaning by matching the observed content of the groups with known patterns (e.g., the presence of long hair and skirts in one of the groups indicates that the group is one of females).

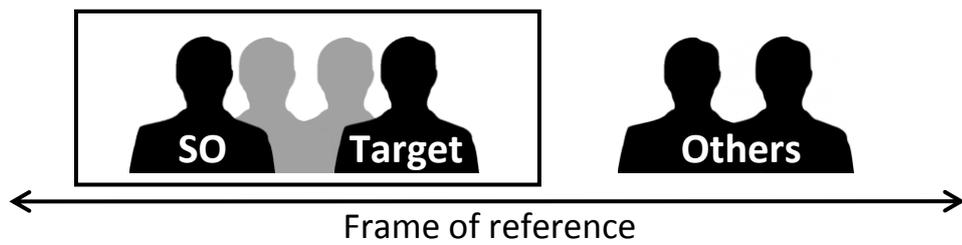
Applying the perceiver readiness and fit interaction to transference is straight forward. Beginning with comparative fit, we can posit that a SO and target category is more likely to become salient to the extent that the distance between the SO and the target is smaller than the distances between those two stimuli and other stimuli in the frame of reference. Or in other words, SO and target category salience is more likely under conditions of high meta-contrast. This to some extent parallels, but also extends, the social cognitive model of transference's principle that transference will be cued by characteristics that are shared across the SO and

target. Yes, the principle of comparative fit anticipates that shared SO and target characteristics will increase the likelihood of transference occurring, just as the social cognitive model does, but it also anticipates that what is shared or not shared with other people in the frame of reference will also play a role in determining whether transference occurs. This is depicted in Figure 5.1; there we show how the salience of a SO and target category can be made more likely due to either an increase in the number of shared characteristics between a SO and a target (scenario B), or alternatively via a decrease in the number of shared characteristics between a target and other people (scenario C). Indeed, the precognized distances between the SO and target and others in the frame of reference will be critical in establishing the meaningfulness of a SO and target category. This is because in the absence of others within the frame of reference (i.e., in addition to the SO and the target) a SO and target category will not become salient; if interclass distances are nonexistent then intraclass distances cannot be small in comparison (or mathematically speaking, the meta-contrast ratio would be missing its denominator). This should have an intuitive appeal. If the frame of reference consists of only two objects then attending to what is shared between the two makes little sense; what is meaningful for the perceiver will be those features that distinguish one from the other.

A. Baseline SO and target category salience



B. Increased SO and target category salience



C. Increased SO and target category salience

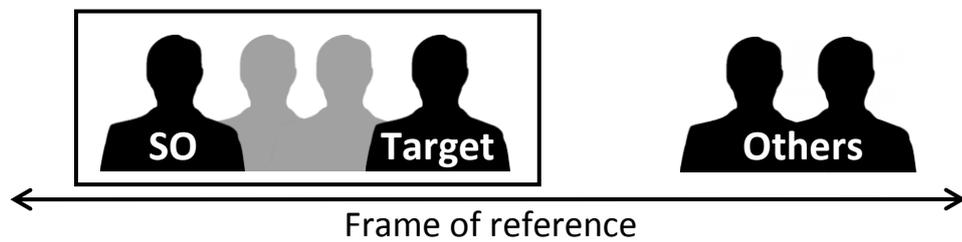


Figure 5.1. Varying SO and target category salience as a function of different shifts within the frame of reference. Increased salience is denoted by the solid category border while the consequent degree of accentuation is depicted by the shaded figures. The position of the black figures within the frame of represents the “objective” precognized distances among these social stimuli (see also Haslam, 2001).

The principle of normative fit provides a further extension of the role of the observed stimuli in constraining transference, this time in regard to the content of

transference, and in two specific ways. First, normative fit would suggest that we should not expect a SO and target category to accentuate what is shared between a SO and a target across all possible dimensions evenly. Instead, a SO and target category will have particular content, where that content is to a large extent a reflection of those dimensions where there is a high degree of meta-contrast. For example, if a SO and target are experienced as being comparatively close in terms of their degree of professional ambition (e.g., they both are hardworking and driven, they both actively develop strategic professional networks, and they both seek out opportunities to demonstrate their skill and aptitude) then it is in areas relating to professional ambition that we would expect to see the most accentuation; conversely, in areas not relating to professional ambition (e.g., favourite foods, hair colour, sporting pursuits) we would expect to see mild accentuation at best. To put it another way, the principle of normative fit suggests that the observed characteristics of the SO and target play a central role in establishing what is *defining* about the SO and target category. What is defining of that category is then the lens through which both the SO and the target will be perceived, with non-defining dimensions remaining peripheral to social perception.

Something akin to the dimensionality of transference has come up before in the social psychology of transference. Andersen and Glassman anticipated the possibility that “not all aspects of the significant other representation are equally likely to be applied” (1996, p. 273). Indeed, in a number of experiments it has been observed that some SO characteristics are more likely to be transferred than others (Andersen & Cole, 1990; Pierro & Kruglanski, 2008; Pierro et al., 2009). This has thus far been attributed to the varying centrality of particular characteristics to

stored SO representations (i.e., certain characteristics are more central, or core, to the representation), which to a degree sits well with our categorisation based model. However, rather than making characteristic centrality a feature of stored SO representations, here characteristic centrality is understood to be a result of the categorisation process and a property of the emergent salient SO and target category. Which characteristics are central and which are not is thus fluid and is always determined by the interaction between comparative fit, normative fit, and perceiver readiness. This is true for SO and target categories in the same way that it is true for any other social category. For example, Reynolds, Turner and Haslam (2000), in the context of the categorisation of social groups, explored the potential impact of dimensionality in the context of inclusive self-categories. They found across three studies broad support for the prediction that ingroup and outgroup favouritism would occur to differing degrees depending on the extent to which traits were typical of the ingroups and outgroups in question. This prediction was predicated on the expectation that categorisation schemes are limited in their dimensionality and that some dimensions, or traits in the context of this study, are more typical and defining to social categories than others.

It is also relevant here that Reynolds and colleagues viewed their findings from the perspective of the impact of normative fit on the degree of social category salience. They theorised that the different measures used to test for ingroup favouritism are likely to themselves influence the degree of ingroup favouritism that occurs. This is because some of those measures undermine the salience of ingroup categorisation schemes by being normatively ill-fitting. More specifically, they reasoned that on those occasions where negative trait measures are used to test for ingroup favouritism the salience of an ingroup might be diminished

because thinking of one's own group as "less bad than the out-group" (2000, p. 68) is a violation of one's theories and beliefs that one's ingroup is on the whole a positive entity. Paolini, Harwood and Rubin (2010) used a similar rationale in their research, also connecting normative fit with intergroup relations. Across two studies they found support for their prediction that, when there is a background of intergroup tension, negative valenced contact would result in greater social category salience than positively valenced contact. Their rationale being that negatively valenced contact is more normatively fitting for those social categories where perceiver expectations are negative. Because social category salience is considered to be critical to the efficacy of intergroup contact in improving intergroup relations (social category salience is the cognitive pathway to generalised intergroup attitudes; see Brown and Hewstone, 2005), Paolini and colleagues suggest wariness of unstructured intergroup contact as an intervention. They conclude that, all things being equal, unstructured contact is more likely to entrench existing intergroup beliefs than attenuate them (see also Barlow et al., 2012).

The research of both Reynolds and colleagues (2000) and Paolini and colleagues (2010) connects normative fit with perceiver readiness, which as we will recall from Chapter 3 includes the beliefs, ideas, or theories that a perceiver may hold at any particular time. This point of connection is the second valuable contribution of normative fit to our categorisation based model of transference. It is on the basis of this connection that it can be theorised that the content of observed stimuli, not just the distance relations between them, will have an important constraining role in whether any particular categorisation scheme will become salient. Put in the language of SCT, a high meta-contrast ratio will only be

expected to result in a corresponding salient social category if the direction of meta-contrast is congruent with the belief and theories of the perceiver; said otherwise, their *expectations*.

Applying the above to transference, from here we can additionally posit that a SO and target category will only become salient to the extent that there is sufficient comparative fit, where average interclass distances exceed average intraclass distances, *and* the direction of those distances does not violate the expectations of the perceiver. Continuing on from the earlier example, we can say experiencing a SO and target as being comparatively close in terms of their degree of professional ambition will only result in a salient SO and target category, and consequently transference, if the experience of these two as ambitious does not jar with some prior notion or idea of the SO, the target, or both. For instance, if displays of ambition to be a professional boxer are unusual for our stay at home mother, or for our newly experienced other who we understand is a chaplain, then the likelihood of a shared category becoming salient on the basis of boxing ambition would be low, even if in the present moment both SO and target are both displaying a great deal of interest in taking up boxing.

In addition to our theories and beliefs about the social world, perceiver readiness also encompasses our current motives, values, goals, and needs, which is consistent with Bruner's early conceptualisation of the categorisation process (1957; See also Secord & Jourard, 1956). Perceiver readiness is therefore a highly wide-ranging and broadly defined concept. Such breadth is necessary, however, in order to adequately reflect the reality that a perceiver's contribution to the act of social perception is never passive. Social perception is instead always a highly active and motivated process, driven by perceivers' short term and long term

objectives. Or to paraphrase a classic adage, *social perception is first and last and always for the sake of our doing* (James, 1890/1950). It is here then that we should incorporate how transference may be of service to the perceiver. This brings us close to the theorising around the relational self. Recall that the relational self represents an attempt to expand the social psychology of transference into a partial model of personality; one that encompasses self-relevant motivational processes such as need for belonging, autonomy, competence, meaning, and felt security (Andersen & Chen, 2002). Without getting into the validity of any particular theorised motive³, it is within the domain of perceiver readiness that such aspects of self-psychology may be integrated. Perceiver readiness therefore becomes an avenue through which transference can be connected to other psychological concerns of the perceiver.

Overall comparison with the social cognitive model of transference

At this point we have detailed the categorisation based account of transference in full. Thus, it should be clear that this categorisation based model entails a substantial extension from the starting point provided by the social cognitive model of transference. In that model what predicts transference is principally a single factor: the observed similarities between a SO and a newly encountered person. In the model we have articulated above, transference is constrained by three factors: perceiver readiness, comparative fit, and normative fit, all acting in interaction, with no factor being more or less critical than any other.

It is actually possible to entirely accommodate the social cognitive model within this new SCT based account, although to achieve this the role of similarity in transference must be reconceptualised. As we have seen in Chapter 3, from the

social identity perspective, similarity is not an antecedent to social perception, but rather is an outcome of it. As such, it is incongruous with the social identity approach to think of similarity as a characteristic of the environment and as a direct driver of transference, as it is in the social cognitive model of transference. Instead, similarity must be thought of as the result of a cognitive process, one that is a mediator between the features of stimuli and subsequent perception of those stimuli. Here the relationships between the stimuli (given the label distances in an imperfect but convenient shorthand; see Chapter 3) inform a sense of stimuli similarity, which in turn changes the way those stimuli are perceived. If this can be accepted then an integration of the two models becomes relatively simple (Figure 5.2). Similarity becomes synonymous with social category salience, while transference, or the perception that SO characteristics are present in a new target, becomes synonymous with accentuation. Meanwhile the degree to which the SO and target share features, now intraclass distances, naturally finds its place as one half of the metacontrast ratio calculation that drives comparative fit.

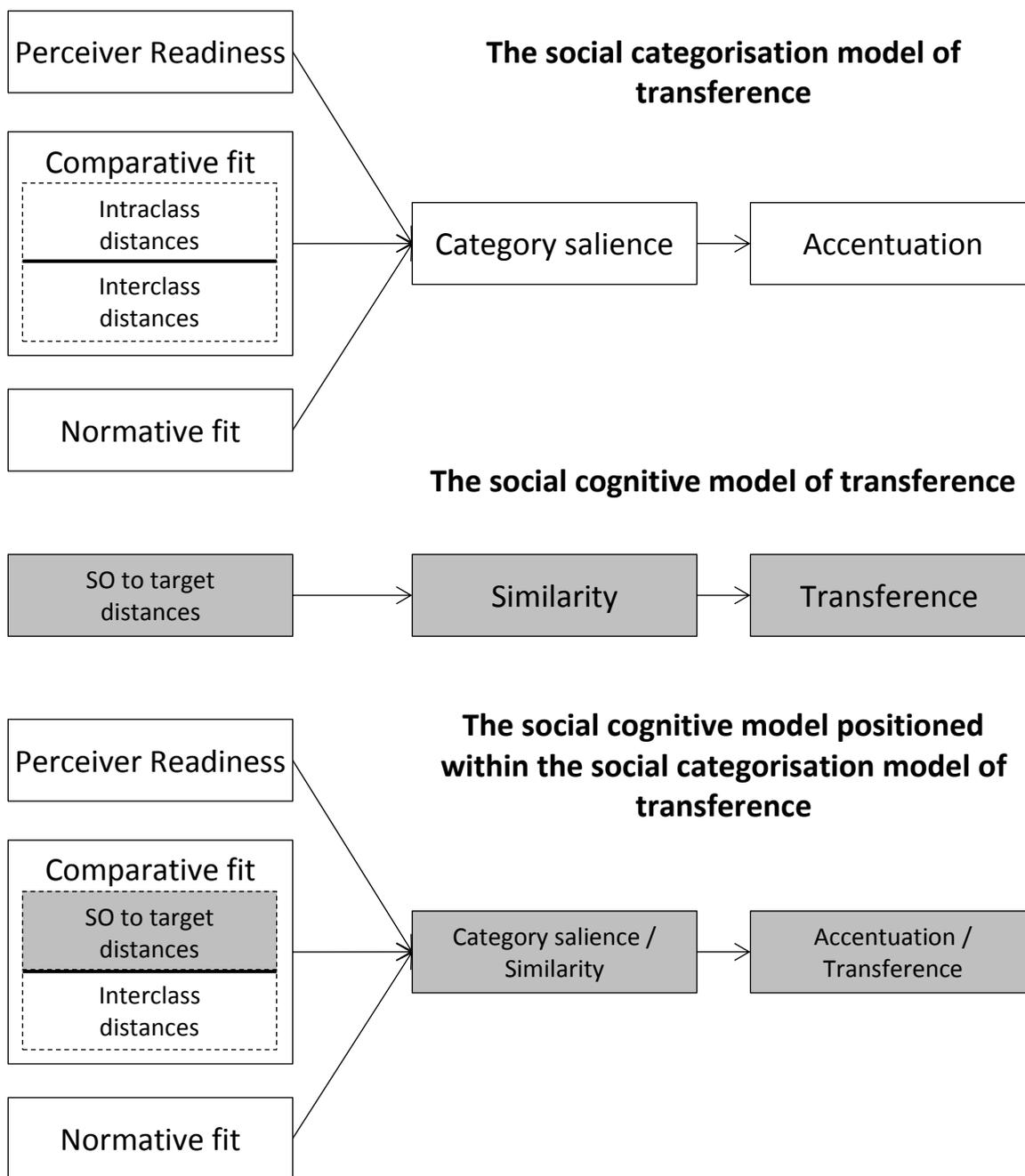


Figure 5.2. The social cognitive model of transference subsumed within the social categorisation model of transference.

Accommodating the social cognitive model of transference within the social categorisation model of transference helps make clear the exact nature of theoretical extension we are advancing. The proposed model adds three more

factors to the list of those things that are critical to determining whether or not, as well as in what form (i.e., what will be the content of the SO and target category), transference will occur. These are perceiver readiness and normative fit, as detailed above, but also specifically interclass distances, as opposed to intraclass distances, meaning what is shared or not shared between the SO and the target with others in the frame of reference.

Before turning to the immediate theoretical implications of this model, it is worth taking a final moment to again take note of the parsimony of the model. This is because it is possible that, by highlighting the increase in the number of theorised constraints on transference, we may unintentionally give the impression that the model entails a series of additional novel theoretical assumptions. This is not the case. Nothing in the above model is new in terms of the social psychology of social perception and impression formation. Cognitive accentuation, social categorisation, category salience, perceiver readiness, comparative fit and normative fit, are all tried and true concepts that have been present in social psychology for upwards of 30 years. All we have done is applied this understanding of social perception to the particular context of transference, which up until this point had been treated as a special case of social perception. Said otherwise, the theoretical thrust of the above model is to bring transference back within the fold of everyday social perceptual processes. We can therefore consider the above to be parsimonious from three different perspectives. First, as observed earlier in this chapter, the present model does not necessitate a separate category activation and application process in addition to the online category formation process posited here. Second, the model in fact does not require us to posit any additional theoretical assumptions to that which has been established already in

the social identity approach. Third and finally, the above model abandons the broad assumption that transference is driven by a distinct cognitive process.

Theoretical implications

In Chapter 3 we identified three key theoretical limitations of the social cognitive model of transference. These related to a) similarity based cueing, b) SO representation storage, and c) impression formation. At this point, with a social categorisation model of transference under our belts, we return to each of these areas in turn. As will be seen, in each of these three areas the categorisation based model allows for some immediate progress to be made. This is not to say that in any particular area the social categorisation model resolves all possible lines of enquiry; far from it. In fact, on a number of occasions the progress we speak of merely takes the form of turning us toward the *right questions*. In any case, what follows is an advance of our thinking around the transference phenomenon.

Similarity and transference as outcomes of SO and target category salience

In Chapter 3 we raised the question, if transference is cued by an observed similarity between a SO and a newly encountered person, how then is that similarity observed? In the social cognitive model of transference, observed similarity is understood as the degree to which the SO and the target share features as stimuli irrespective of perception (again reflecting its objectivist metatheory, see Chapter 4). However, as we have articulated in our discussion of comparative fit, such an understanding does not sufficiently reflect the fluidity of similarity as a function of perceivers' frame of reference. To what extent features are shared is a comparative quality, and to be able to say that a SO and target share features requires us to also know the extent to which the SO and target share or do not share features with others; in other words, the interclass distances. SO and

target feature “sharedness” only makes sense in the context of a particular broader frame of reference. Viewed in this light, the social cognitive model’s similarity cueing account begins to look incomplete; it neglects the interclass distances that are necessary for inclusive social categories to become salient. In sum, comparative fit suggests that it will be insufficient to only attend to SO and target feature overlap, or intraclass distances, if the goal is predictive power.

There is a second reason for us to question the completeness of the social cognitive model of transference and its treatment of the concept of similarity. In Chapter 4, in the context of our discussion of objectivism versus social constructionism, we came up against the issue that similarity cannot exist in the absence of some form of constraining theory. When it comes to social stimuli there are always a practically infinite number of features that are either shared or not shared between stimuli. Or to return to Murphy and Medin’s (1985) example, just as what is shared or not between a plum and a lawnmower could be almost anything, the same is true of any two people, including SOs and newly encountered targets. Indeed, both a SO and a target are likely to weigh less than 10,000 kg, not exist 10,000,000 years ago, not hear well (at least if they are elderly), can be dropped, take up space, etc. Less facetiously, both may be white, middle class, male, like skiing, have blond hair, are Australian, are short, can swim, identify as atheist, enjoy a beer, etc. The point being that given any two random people there will always be an endless list of arbitrary shared features, each driven by some degree of comparative fit. Thus, something additional is needed to allow us to reduce the number of dimensions of sharedness, or to allow for *selectivity in perception*. That “something” is the constraining theories and perspectives of perceivers. Perceivers bring with them ideas and beliefs about what relationships

will exist between stimuli, as well as goals and motivations that make some dimensions of greater interest or relevance to the perceiver than others (see also G. L. Murphy, 2005). It is this that narrows down perception to that which is within the realm of attention and that which is useful (see Oakes & Turner, 1986b, for this argument applied to the other side of the coin: distinctiveness).

What we have just described is, of course, perceiver readiness; the perceiver's past experience, present expectations, current motives, values, goals, and needs. It is perceiver readiness that allows us to bootstrap ourselves out of an unbounded and thus meaningless perceptual experience. Yet perceiver readiness, or another comparable concept, is absent from the social cognitive model of transference. Instead, the cueing of transference on the basis of shared features between the SO and the target is a "bottom up" process, positioned in *contrast* to the perceiver's contribution to transference (see Figure 2.1, Chapter 2). Stimuli sharedness is thus presumed to be an inherent characteristic of said stimuli; one that does not require input from the perceiver to identify or discern. It is in this area then that the social cognitive model of transference may also be said to be incomplete. By not including the constraining influence of the perceiver in determining the dimensions on which similarity is judged, similarity becomes functionally unmanageable.

In sum, there are two reasons to view the social cognitive model's use of similarity as an antecedent to transference as insufficient. That invocation of similarity, which rests on a conception of similarity as an innate quality of objective stimuli, firstly fails to account for the comparative and fluid nature of similarity, and secondly fails to account for the perceiver's role in determining, *inter alia*, the dimensions on which similarity will be judged. For these two reasons

observed similarity is necessarily limited in its value as an antecedent to transference. Without a coherent explanation of where observed similarity comes from, we cannot expect the model to retain predictive power.

These limitations are not present in the above SCT based account of transference, where similarity is understood as a consequence of salient inclusive cognitive categorisation. This allows us to answer our original question: we can now state that observed similarity is a result of the interaction between perceiver readiness, comparative fit and normative fit. Stimuli feature overlap plays a role in this, but that role is by logical necessity only a partial one; stimuli feature overlap, or intraclass distance, constrains social categorisation via its impact on comparative fit.

Really though, our original question (i.e., where does observed similarity come from?) is the wrong question to ask in the context of transference. This is because observed similarity is actually tangential to the transference phenomenon. Really, explaining where similarity comes from *does not* serve to flesh out our model of transference. Instead, better understanding similarity advances our model of transference by pushing similarity, as an antecedent to transference, aside. As we have seen, in the SCT based model transference is not cued by observed similarity, and instead both similarity and transference are outcomes of the antecedent perceptual process of social categorisation. This allows us to rephrase our question into something more to the point: what factors lead to the emergence of a salient SO and target category? To this we can give the answer, the interaction between perceiver readiness and comparative and normative fit.

SO knowledge, online category formation and connectionist networks

Apart from the occasional fleeting reference to the online construction of representations of the self (Andersen & Berenson, 2001; Andersen & Chen, 2002), the clear message of the social psychology of transference is that SO knowledge is stored in the form of cognitive representations, ready for activation and application to newly encountered targets. In contrast, in the above social categorisation based model of transference there is no role for SO representations that are stored as static entities ready for application. Instead, SO knowledge is more generally understood to be the theories, beliefs, and expectations of the perceiver; all of which are part of perceiver readiness. At first glance this may seem like a step backward. Here a seemingly concrete explanatory mechanism, SO representations, is being replaced by something more amorphous. In the present chapter section, however, we will explain why the latter is actually a step forward. This case will be made on the basis of *neural plausibility*.

Symbolic versus connectionist models of cognition. Across the 1980s cognitive psychology saw the emergence of *distributed connectionism* as a theoretical tradition (Smith, 1996). Distributed connectionism (henceforth “connectionism” for brevity sake) in psychology is the expectation that cognitive activity occurs in a network space with certain properties. Most critically, these networks are comprised of nodes and connections where nodes do not mean anything in and of themselves. In other words, nodes do not correspond to particular semantic content (i.e., concepts, ideas, knowledge, facts, etc.). Where semantic content does exist, its corresponding form in a connectionist network is a pattern of activations and connectivity across multiple nodes. This distinguishes connectionist models of cognition from *symbolic models*, which may still be

described as a network, but where each “piece” of semantic content has a permanent and insulated presence in the network space. For example, in McConnell’s (2010) associative network model of the self, the *multiple self-aspects framework*, units of self-knowledge (i.e., semantic content) are stored, essentially as nodes, in memory, with connections between one another depending on the relationship between units (Figure 5.3). Should one or a number of these units be cued by some internal state or external stimulus, they are activated and become part of the current cognitive state of the perceiver. McConnell’s model may be said to be symbolic in that all of the components within the system *mean something*. Andersen and Klatzy’s (1987) exploration of the difference between the cognitive representations of traits and social stereotypes (see Chapter 4) serves as another useful example. They are also clear in advancing a network model where nodes equate to “conceptual representations” such as attributes and objects (p. 235). Smith (1996) suggests a filing cabinet or storage bin as an appropriate metaphor for symbolic models along these lines. This is because symbolic models conceptualise information storage much like documents in a filing system; each can be interpreted in isolation and, although documents may be side by side, they do not interact with one another.

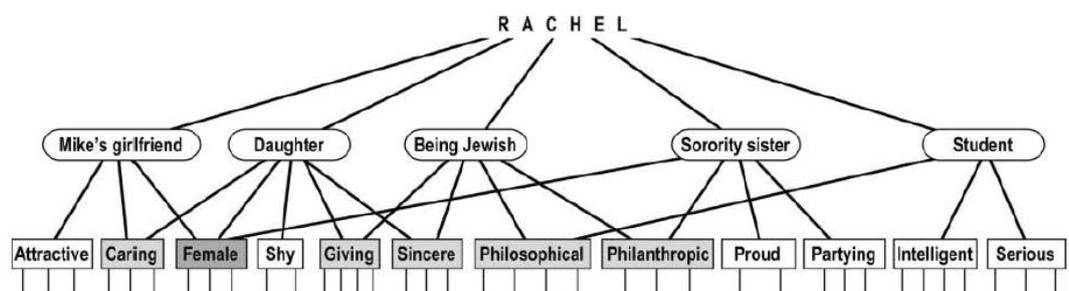


Figure 5.3. The multiple self aspects framework, depicted as a hypothetical self concept for a person called Rachel (McConnell, 2010). Note that each node in the network represents a stored piece of semantic content.

Connectionist models paint a different picture (Smith, 1996; Conrey & Smith, 2007). Because semantic content is the outcome of an activation pattern across multiple nodes and multiple connections, it does not make sense to think of semantic content as stored in the form of discrete and inert units. Instead, each activation leaves a residual impact in the network space in the form of increased or decreased connection weights among nodes; connection weights being the ease by which activation can occur between nodes. This means that when semantic content is not presently being supported by a pattern of activation, cognitively speaking it disappears from existence. What does continue to exist is its impact on connection weights among the network, and therefore the readiness by which a similar activation pattern, with corresponding semantic content, may emerge again. This is not to say that knowledge is not stored in memory. It patently is, and it is clear that we are able to bring to bear vast quantities of information to new situations. The difference is that in connectionist models the storage of knowledge is not presumed to resemble in any way our experience of the same. This is in line with our discussion in the previous chapter around the potential disconnect between cognitive processes and the experienced outcomes of those processes. Indeed, we

may consider residual connection weights among nodes in a neural network as a model of “sub-symbolic” knowledge.

The clear advantage of modelling cognition sub-symbolically, in terms of nodes and the activation and connection weights between those nodes, is that it is in line with the physiological observations of neuroscience. The architecture of the brain entails a large network of cells (neurons) that are extremely interconnected with one another (through axons and dendrites). This convergence with neuroscience is not, however, the only reason that connectionist models of cognition are attractive in cognitive psychology. Connectionist models are also attractive because they also possess a number of processing advantages purely on the basis of the type of structure they describe. For one, connectionist models are efficient with regard to learning. In connectionist models the same mechanism by which an idea or concept comes to mind (i.e., becomes cognitively prepotent or salient) is that which also allows the same idea or concept to find its place in memory. Because any activation event at the same time strengthens or weakens corresponding connection weights, resulting in facilitated or inhibited activation in the future, learning occurs as a natural by-product of activation. Memory is thus “updated” without the need of any additional cognitive action on the part of perceivers. In connectionist models learning may occur across concepts even in the absence of direct activation. This is because patterns of activation are said to take part in the same network space. Nodes and the connections between nodes are not perfectly insulated from one another and physical overlap across different patterns of activation is anticipated; activation patterns may share parts of their structure with one another. Further, residual changes to connection weights caused by the activation of a particular activation pattern have the capacity to alter the

architecture of the network space in which other activation patterns take place, in turn affecting the structure of said patterns. Thus, within a connectionist model, engaging with one idea or concept has the capacity to alter the way in which other ideas or concepts are understood via that single cognitive event. To give a basic example, if a perceiver were to come across someone's pet poodle which has some novel characteristic (e.g., it is unusually small), any learning that occurs is not necessarily limited to the concept of that particular dog or other "considered" canines. Instead, without any further activation or cognitive activity, and without expending any further cognitive resources, that perceivers understanding of all dogs can be impacted upon and updated (e.g., dogs have a wider potential size range).

The potential for pattern overlap in connectionist models also allows for efficiencies in terms of the utilisation of storage space. Because activation patterns may occur in the same network space, using many of the same nodes and connections between nodes, a singular cognitive architecture can be used to support the cognitive activity corresponding to all ideas and concepts. Moreover, because it is the patterns of activation, not any particular node, that corresponds to an idea or concept, a limited number of structural features can be used to underpin a vast quantity of ideas and concepts. Indeed, the number of different connection patterns that may possibly occur has the potential to increase exponentially as additional nodes are added to that structure. Of course, a straight forward exponential relationship assumes that all nodes are connected with one another, which is probably an unrealistic assumption. Nevertheless, this potential efficiency of connectionist network structures grants a substantial advantage over a filing cabinet like structure. Filing cabinet like structures, as implied in symbolic models

of cognition, would require as many nodes as there are possible ideas, concepts, thoughts, etc., all stored separately but still alongside one another.

Connectionism and the social identity approach. At this point we are beginning to tread familiar ground. We came in contact with similar themes during the earlier discussion of the principle of social category salience. We noted that the shift within the social identity approach away from an activation and application model of cognition, toward an online category formation conceptualisation, was in part driven by concerns about cognitive efficiency, and consequent plausibility issues. In that chapter the idea of a stored repertoire of social categories, one vast enough to accommodate all the types and subtypes of people ever experienced, was deemed to stretch credulity. What was called for instead was a more flexible and adaptive model of cognition; one that is informed by past experience and expectations, but is not rigidly constrained by such factors. This is a key point of congruence between the social identity approach and connectionist theorising. Both are sceptical of the existence of stored and fixed representations in memory on the basis that such a structure would struggle to accommodate our cognitive requirements. Indeed, both the social identity and connectionist approaches represent efforts toward an alternative to activation and application models of cognition.

It terms of those efforts, both the social identity approach and connectionism are considered highly complementary to one another (Abrams, 1999; McGarty, 1999; Smith, 1999, 2006). In particular, both advocate for a model of cognition where the outcome of perceptual processes is best thought of as constructed anew in each instance. In the social identity approach this takes the form of online category formation, where cognitive categories are constructed

online and are simultaneously a reflection of the stimulus array (i.e., the frame of reference) and the lens through which the perceiver encounters that array. In connectionist models, as described above, patterns of network activation are said to be guided by past activation via the connection weights present in a perceiver's network space. They are also said to be influenced by sensory input, where features of the stimuli array have a direct impact on the network space. The dual influence of existing connection weights and sensory input within the same network space means that any activation pattern will necessarily be an emergent and novel outcome of both the characteristics of the perceiver and the environment, mirroring the social identity approach's online category formation message.

Overall, the extent of the parallels between the social identity approach and connectionist theorising suggest that both theoretical perspectives are broadly speaking converging on the same reality, albeit from different initial perspectives; the social identity approach has come at this issue from a background in social interaction and social perception, while connectionism has emerged from a background in cognitive psychology and neurology. This is not to say that either renders the other redundant. Rather, the suggestion here is that both perspectives should be retained in any account of social perception, with the social identity approach describing the process of social categorisation at a functional level, along with a number of its implications (e.g., social influence, group polarisation, collective action), and connectionist models describing in further detail the cognitive mechanisms that underpin that process. In fact, steps have already been made in that direction, with connectionist networks being successfully used to model SCT's principle of accentuation (Van Rooy et al., 2003).

Having established the close relationship between the social identity approach and connectionist theorising, we are in a position to round off our discussion in Chapter 3. Early in that chapter we noted that it is difficult to marry symbolic models of cognition, of which social cognitive model of transference qualifies (cf. Andersen & Berenson, 2001), with our understanding of brain architecture (i.e., “the fleshy mess”) and are hampered by serious efficiency concerns. Connectionist models of cognition perform better in these domains. They possess a number of natural efficiencies and have an as yet unmatched neural plausibility, which makes them highly attractive as an alternative. An understanding of connectionist theorising, as well as its potential hand-in-hand relationship with the social identity approach, thus resolves for us the challenge faced at the outset of this chapter section. The social identity approach takes a critical view of models of cognition that hinge on the activation of stored symbolic representations, preferring instead a more “fuzzy” characterisation of perceivers’ cognitive mechanisms. Far from being a step backward, however, what we find is that more fuzzy cognitive models is exactly what is called for by recent advances in the field. Rather than replacing concrete symbolic models of memory with a veritable black box, the social identity approach provides a point of linkage to the well developed and highly specific world of connectionist modelling.

With the above in mind, it is appropriate now to return to the question posed in Chapter 3: If transference is the application of stored SO representations, how and where then are those representations stored? We can now advocate with substantial clout for a rejection of the concept of stored symbolic representations that are activated and then applied in the course of social perception. Instead, transference is sensibly understood as an outcome of an online category

construction process, which is itself an outcome of an interaction between perceiver readiness and comparative and normative fit, operating within a neurologically plausible connectionist architecture.

Impression formation as a unified cognitive process

If transference is the application of SO characteristics to a newly encountered person, what exactly, cognitively speaking, are those characteristics being applied to? This was the final question that we came up against in Chapter 3. There we found that the activation and application nature of the social cognitive model of transference leads us toward logical dead ends in this area. Now, having laid out our social categorisation based model of transference, and detailed the parallels with connectionist theorising, we are in a position to progress our thinking in this area also.

To briefly recap, in the previous chapter section we put additional theoretical weight behind an online category formation perspective of social perception, imbuing it with a more tangible quality as an alternative to the concept of stored cognitive representations (i.e., “online category formation can be thought of as operating within a neurologically plausible connectionist architecture”); online category formation being an alternative to activation and application models of cognition. There we used the online category formation understanding to offer a favourable alternative to the traditional thinking around activation processes. The same is possible in terms of the other side of the coin, *application*. That is, we can move past the usual presumption that there exists some manner of construct that representations or characteristics can be applied to.

As we have seen above, in an online category formation model a picture is painted whereby the targets of social perception are just as much bound up in the cognitive activity required to produce that perception as any other contributing input. In the language of the social identity approach this is the contribution of fit, both comparative and normative, to the category formation process, while in

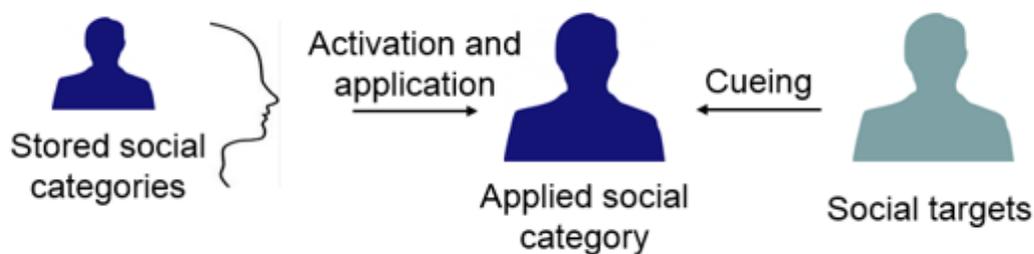
connectionist language this is the influence of sensory input in the network space. In the context of transference, this means that we would no longer think of a newly encountered target as in some way wholly present and fully formed in the perceptual field, ready to have SO characteristics applied to them. Instead, the stimuli input of newly encountered targets would be expected to impact the categorisation as a partial and incomplete influence. Only when the category formation process is complete can it be said that a social target is present in cognition in any recognisable semantic sense. Bringing this back to our question, what we find is that because transference *is not a process of applying SO characteristics* it is therefore inappropriate to seek out some discrete part of the cognitive system for things to be applied to.

This isn't really an extension of the above theorising, but is instead simply a case of further emphasising the implications for impression formation processes. Nonetheless, it is worth taking the time here. For one, this short discussion is another good example of how an online category formation approach is able to move us past some of the inherent challenges faced by activation and application approaches to cognition; it is therefore of value to ensure that the implications are clear. Moreover, this discussion presents another opportunity to reiterate the parsimony of this approach to transference. What we have presented above is an alternative to what would otherwise necessitate a dual process model of social perception. The social cognitive model of transference is an account of the impact of existing knowledge and beliefs on social perception, but it does not speak to the development and retention of new information. Subsequently, in order for a semblance of completeness to be achieved, a stimulus learning process would be needed to complement the memory based application process that is the social

cognitive model. Or in other words, if transference rests on a system of “ifs” and corresponding “thens”, then an additional system would be required to produce the “thens” in the first place. In the social identity approach these are one and the same, with the same cognitive process, social categorisation, allowing for both learning and the use of what has previously been learned. In fact, the social identity approach suggests that both will always necessarily occur; because online category formation cannot occur without some constraining influence of the perceiver, and is also simultaneously a new instance of experience for the perceiver, some degree of both knowledge use and knowledge updating (or perhaps reinforcing) is unavoidable.

Key implications for parsimony of the application and activation and online category formation approaches to perception are captured in Figure 5.4. There we see the absence of a category learning pathway, where also absent is the “direct perception” mechanism that categorisation is contrasted against. In contrast, the online category formation approach does not require a direct perception mechanism, and also includes a feedback loop: salient social categories become part of perceivers’ experiences, and ultimately inform their theories of their social world. Of course, the online category formation model is itself incomplete. There are a number of elements unspecified in that model, in particular relating to the exact manner in which sensory information enters into the categorisation process, and the exact manner in which theories and expectations are translated into category expectations (see Chapter 8 for further discussion). However, these are areas of unknown for both the category activation and application and online category formation approaches; it is simply the case that the former removes these issues from consideration via the assumption of a direct perception mechanism.

Category activation and application



Unspecified elements:

- Category learning
- Non-category based, direct perception of target

Online category formation

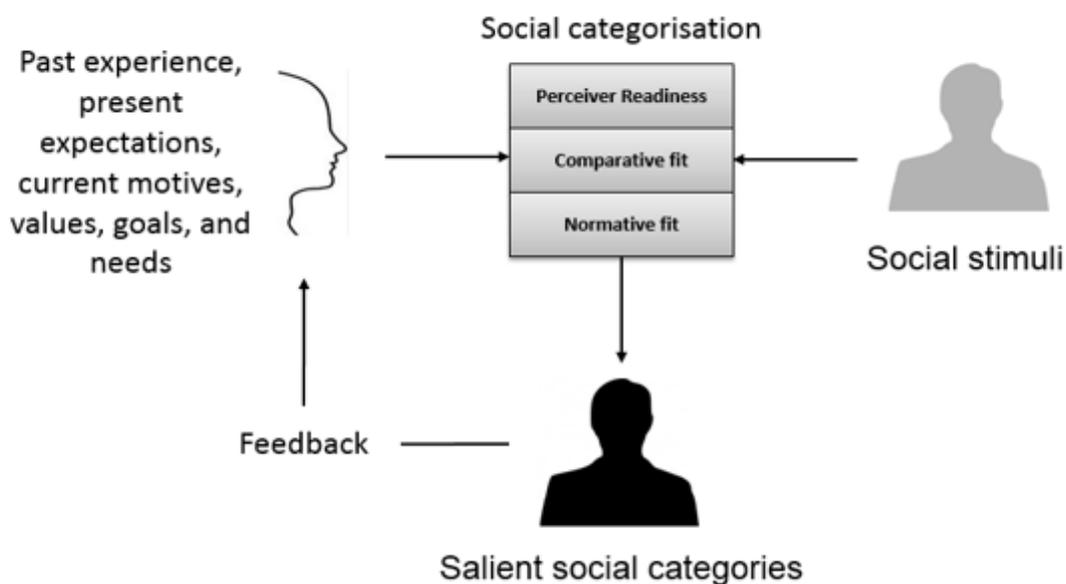


Figure 5.4. The category activation and application approach to social perception and the online category formation approach, with key unspecified elements identified.

Summary and empirical challenge

This chapter began with an introduction of the social categorisation model of transference. The model extends the range of constraints that are anticipated to

be critical in determining the extent to which transference occurs, as well as the form that transference will take, by drawing on established social psychological theory and integrating transference within that theory. That model is thus a substantial extension of the cognitive understanding of transference. In this chapter we also returned to the three theoretical challenges identified in Chapter 3 as largely unaddressed by that incumbent model: similarity based cueing, SO representation storage, and impression formation. There we made use of the newly available social categorisation model of transference to make modest theoretical progress within these areas.

In the last of these three short discussions we took the opportunity to once again affirm the parsimonious nature of the social categorisation model of transference; the theoretical parsimony of our approach being a recurring point in this chapter. We see this as a key advantage of the above social categorisation model, although that parsimony does, however, pose a challenge in terms of corresponding empirical investigation. Above we have described our theoretical thrust as being to bring transference back within the fold of everyday social categorisation processes; from our perspective transference is suitably accounted for in cognitive terms via the model of social categorisation established by the social identity approach. How then does one establish this empirically? What we are essentially tasked with is to prove a negative: that transference is *not different* to other social perceptual processes accounted for by social categorisation.

Fortunately, there are two pathways through which this challenge can be met. First, we can look to the additional predicted constraints of transference, beyond SO and target distance, that the proposed model includes. Here it is possible to leverage the additional detail of the “how and when” of transference

that is suggested by the social identity approach. The utility of the social categorisation model of transference can be demonstrated by studies showing that transference can be predictably manipulated via comparative fit, normative fit, or perceiver readiness. Second, we can put on trial some of the posited unique aspects of the social cognitive model of transference; those which are used to justify the characterisation of transference as a special case of social perception, underpinned by a distinct cognitive process.

These are the two directions that will be taken in the following empirical chapters. In Chapter 6 and Chapter 7 attempts will be made to show that, in addition to SO and target distance, transference may be predictably affected by manipulations of comparative fit and perceiver readiness respectively. In the course of that same empirical activity, we will also attempt to manipulate transference in a manner that challenges the notion that SO based perception is underpinned by stored, stable, and chronically accessible, n-of-one cognitive representations; chronically accessible stored n-of-one cognitive representations being a, if not *the*, key distinguishing feature of the social cognitive model of transference.

The degree to which we are successful in these empirical pursuits will then be reviewed in Chapter 8, which serves as the beginning of a general discussion. There we will also discuss key limitations to the present empirical program as well as possible future research directions.

Notes

1. Diffusion is imperfect terminology. In chemical science diffusion is the movement of a substance from regions of high concentration to regions of low

concentration. If we extend the metaphor we might anticipate accentuation to dilute the perception of SO characteristics within the SO. This is not our expectation.

2. Social projection in the sense described here should not be confused with projection as described in the psychodynamic tradition. In that literature projection is understood more as the perceptual displacement of negative characteristics, either traits or motives, away from ourselves and toward others (Allport, 1954)

3. For instance, there is some scepticism among social identity theorists with regard to the idea that humans have a fundamental need for belonging (Platow, Hunter, Haslam, & Reicher, 2015; Spears, Ellemers, Doosje, & Branscombe, 2006; see also Chapter 8).

CHAPTER 6

STUDY 1: TRANSFERENCE AND COMPARATIVE FIT

In order to build an empirical case for the social categorical nature of transference we must be able to demonstrate the predictive utility of that perspective. Specifically, we must be able to demonstrate greater predictive utility than that which can be obtained via the social cognitive model of transference. Fortunately, as made clear in Chapter 5, the social categorisation model of transference that we have advanced introduces a number of additional constraints on transference in comparison to the social cognitive model of transference. While, the social cognitive model of transference rests almost entirely on intraclass distance (or SO to target similarity in the lexicon of that model) as a driver of transference, the social categorisation model of transference anticipates that the extent and nature of transference will additionally be determined by interclass distances, normative fit, and perceiver readiness factors. This means that added predictive utility of the social categorisation model can be demonstrated if data can be obtained where transference is lawfully influenced by these additional constraints. In this chapter we report on the first of our efforts in this area: the aim of the present study is to show that the extent of transference will be in part determined by the principle of comparative fit.

Comparative fit is the obvious first port of call for an empirical program of this kind. This is because comparative fit can be a particularly persuasive aspect of SCT's account of social categorisation, for two reasons. First, comparative fit

carries with it an air of precision. Because comparative fit can be thought of in mathematical terms, in the form of the metacontrast ratio, predictions made on the basis of comparative fit bring along the rhetorical weight of the “hard sciences”. The metacontrast ratio alludes to a process of literally *calculating* how people are likely to respond to social stimuli, which is nigh unheard of in the context of social psychological models and hints at a future where social psychological interventions are wielded with as much confidence as one might have when combining an acid with a base, or when managing forces by way of a pulley. Second, comparative fit manipulations can be powerfully counterintuitive. For those who are not used to viewing similarity and difference as an outcome of a comparison process, and instead are accustomed to thinking of both as inherent qualities of object relations, to be able to hold intraclass distances constant and still have similarity or difference perceptions change as a function of changes to interclass distances can be very surprising. Said otherwise, to have absolutely nothing change with regard to the characteristics of one group of people (e.g., qualities among male work colleagues) and then have those people treated as more or less equivalent as other people enter or exit the environment (e.g., the changing presence or absence of female work colleagues), is for many a bit astonishing. The principle of comparative fit is thus able to contribute to our understanding of social perception well beyond that which is common sense, where offering little more than common sense is an accusation regularly levelled at social psychological theories. Indeed, this readily apparent added value, coupled with the sense of precision mentioned above, in part explains why the period immediately following the publication of SCT was largely dominated by demonstrations by social identity theorists of the impact of comparative fit on

social perception and social phenomena (e.g., Abrams et al., 1990; Haslam et al., 1995; Haslam & Turner, 1992, 1995; Haslam et al., 1992; Hogg & Turner, 1987a, 1987b; Oakes et al., 1991).

To recap on the application of the comparative fit principle to transference, this was achieved by viewing comparative fit as a partial predictor of the salience of a SO and target category; salient SO and target categories, and the associated intraclass accentuation effects, being the cognitive mechanism that underpins the observation that SO characteristics can come to be seen as shared by a newly encountered target person. Breaking down comparative fit, we argued that a SO and target category is more likely to become salient to the extent that the intraclass distances are smaller than the interclass distances, where intraclass distance corresponds to the shared characteristics between the SO and the target, and interclass distances correspond to the shared characteristics between those two stimuli and other stimuli in the frame of reference.

The transference methodological paradigm lends itself well to comparative fit manipulations. This is because that paradigm is built around the manipulation of the quantity of shared characteristics between the SO and the target, meaning that one half of comparative fit, intraclass distance, is already under experimental control. This can be transformed into a complete comparative fit investigation by augmenting that methodology with a concurrent manipulation of interclass distances, which in this case can be pursued by introducing additional persons into the frame of reference and then manipulating the quantity of shared characteristics between those additional persons and either the SO or the newly encountered target. The latter, manipulating the quantity of shared characteristics

between additional persons and the target, is the path followed in the present study.

In terms of the specific hypotheses selected for testing, in the present study we opted for two: one pertaining to the classic intraclass distance manipulation, and the other pertaining to an interclass distances manipulation. Indeed, because the intraclass distance manipulation is classic within the social psychology of transference, we can consider the first of these hypotheses to be a replication effort. In line with that literature we can predict that memories of SOs will play a greater role in the perception of newly encountered people who share characteristics with those SOs (H1).

With regard to the second hypothesis, there are innumerable options in terms of how one might alter the interclass distances within a frame of reference. Given that any of these would be sufficient to demonstrate the role of intraclass distances, and therefore comparative fit, in driving transference, we selected as straight forward a manipulation as possible: we aimed to produce a basic moderation effect in the context of transference. Specifically, we set out to moderate the impact of the classic intraclass distance manipulation with an orthogonal interclass distance manipulation. We anticipated that the presence of another person in the frame of reference who also shares characteristics with a newly encountered person would reduce the likelihood that in a low intraclass distance condition memories of SOs will play a role in the perception of that same newly encountered person. This is because, following the meta-contrast principle, low interclass distance renders intraclass distances *comparatively* greater. This is depicted in Figure 6.1, which is an adapted version of the earlier Figure 5.1 that served to illustrate the role of interclass distances in transference more generally.

Moving down through the scenarios presented in that figure, a reduction in intraclass distance may be expected to increase the salience of a SO and target category (scenario A to B). However, that increase in salience may be attenuated if there is a concurrent decrease in interclass distances (scenario B to C). Rephrasing this in line with our first hypothesis, we would predict that memories of SOs will play a role in the perception of newly encountered people who share characteristics with those SOs, but this will occur *less so* when characteristics are shared with other people in the frame of reference (H2).

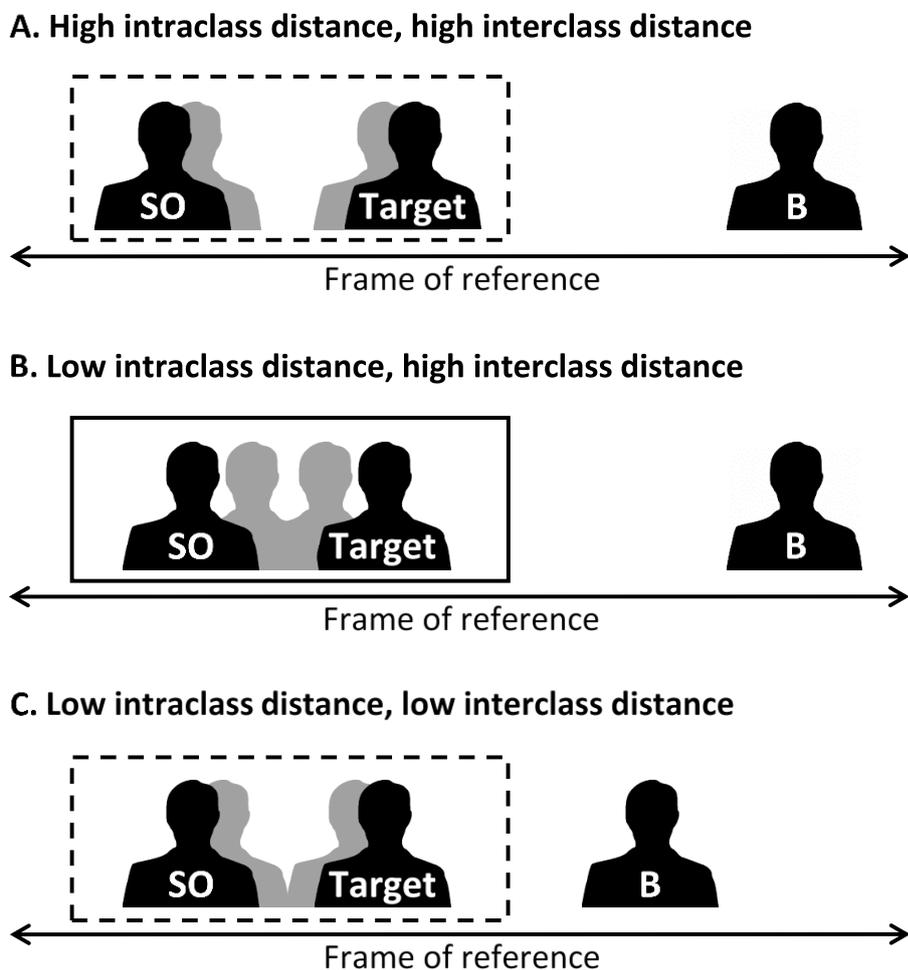


Figure 6.1. Moderated SO and target category salience as a function of changes to intraclass and interclass distances. Increased salience is denoted by the solid

category border while the consequent degree of accentuation is depicted by the shaded figures. The position of the black figures within the frame of represents the “objective” precognized distances among these social stimuli.

It is worth repeating that this is just one of many possible comparative fit scenarios, and that there are thus many other manipulation options available. These include those concerning the distance between the SO and others in the frame of reference, as well as options that introduce or remove people from the frame of reference entirely. Our choice of the particular moderation effect of interest merely reflects an attempt to parallel the existing transference empirical literature as much as possible. By maintaining as much equivalence as possible (e.g., by leaving intraclass distance manipulations unchanged) the additional role of interclass distances in constraining transference effects should be clearest.

Method

Procedure overview

We introduced the idiographic-nomothetic experimental procedure that we will be following, which dominates the social psychology of transference, in Chapter 2. Because that procedure is reasonably complex unto itself, it is worth restating that procedure again in the first instance. We will then turn to how that procedure is adapted to the current research context.

The experimental procedure transpires over two laboratory sessions. In the first session participants are asked to nominate and then describe a SO of theirs, where descriptors are obtained by asking participants to complete a series of sentences about their SO. In this session participants are also asked to nominate

characteristics that are irrelevant to their SO from a list of adjectives, to be used as distractor items in the second session.

After a two week delay participants are introduced to the second experimental session, without revealing to participants the connection between session one and session two. Participants are told that the researchers are interested in the way people form impressions. In the laboratory task participants are asked to remember a series of descriptors about the new person and they are told that their memory will be tested in a recognition test. Unbeknownst to participants they are split into 'high resemblance' and 'low resemblance' experimental conditions. In the high resemblance condition some of the descriptors of the new person are drawn from that participant's own self-generated list of SO descriptors. That new person therefore resembles that participant's SO to some degree. In the low resemblance condition the new person descriptors are drawn from a different participant's SO descriptors. This is described as 'yoking' and results in each pair of participants being exposed to the same SO characteristics in this learning phase. Consequently, any differences between the experimental and control conditions are attributable to the specific relationship between the participant and characteristics from their own SO, rather than the inclusion of more or less SO characteristics generally. In the recognition test participants are asked to declare whether a series of items were present in the earlier presented list of new person descriptors. Here items from that participant's own SO descriptions that were not present in the list of new person descriptors are included. Transference is classically measured in relation to false positive responses for these newly included SO items.

In our research context the manipulation of SO resemblance corresponds to a manipulation of intraclass distance, and is where a test of H1 may take place. Our model conceptualizes intraclass as a continuum, rather than the traditional two levels (e.g. 'on/off'). Therefore we tested across three levels of intraclass distance, in the hope of obtaining stronger evidence for our model of transference. This would also provide evidence against explanations that posit the inadvertent introduction other qualitative differences between the two conditions. The three levels of resemblance were: a high resemblance condition corresponding to comparably low intraclass distance, a low resemblance condition corresponding to medium intraclass distance, and a no resemblance condition corresponding to high intraclass distance.

In terms of H2, this is where a more substantive alteration to the above procedure was made. Specifically, rather than asking participants to perform a recognition task pertaining to one new person in session two, in the recognition task participants were introduced to two newly encountered people. One of those new people (Person A) served the usual purpose as per the idiographic-nomothetic design (i.e., they were the perceptual target against which SO related false positives could be measured), while the other new person (Person B) allowed us to manipulate interclass distances. Specifically, by varying the amount of characteristics that Person B shared with Person A, we could create a shared characteristics, low interclass distance condition, and a no shared characteristics, high interclass distance condition.

Participants and design

Participants were recruited through two separate avenues; one avenue being social media¹, and the other being an undergraduate research participation

program. In terms of the former, social media, 585 online responses were received for session one. Of these, 80 participants completed the session one questionnaire such that they could be invited for the second experimental session, including supplying a contact email. Of those who were invited for session two, 31 returned to participate. In terms of the undergraduate research participation program, 97 third year undergraduate psychology students at the Australian National University volunteered to participate as part of course content. Of these, 79 participants completed the session one questionnaire such that they could be included in second phase of the study. Of those who were included in the second phase of the study, 69 returned to participate.

Taken together there were 100 participants who were included in both experimental sessions. Participants were randomly assigned to one of six experimental conditions in a three (intra-class distance: low/medium/high) by two (interclass distance: low/high) between subjects factorial design. Participants ranged in age from 17 to 65 with an average age of 26². Approximately 14% of participants had learned English as a second language³, and approximately 75% of participants were female^{4,5}.

Procedure

Recruitment. Participants recruited through social media were first invited to participate in a psychological study where they would be required to answer questions about someone important to them. Upon completion of that ostensive study, which corresponded to the first experimental session, participants were presented with information about a second unrelated study, conducted by a different researcher, concerning impression formation processes. Participants

were invited to provide their email if they were happy to participate in this second study, which corresponded to second experimental session.

Participants recruited through the undergraduate research participation program were presented with two ostensibly unrelated psychological studies to be completed as part of content within a third year psychology course covering advanced research methods. Similar to the social media recruitment, the first experimental session was introduced as a study relating to important people in our lives, while the second experimental session was introduced as a study concerning impression formation. Participant responses to the study were used to generate data sets that served pedagogical purposes within the course; however, students were also given the opportunity to indicate at the end of the second experimental session that they did not want their personal data included in any subsequent analysis. In all other respects the methodology was equivalent for all participants, irrespective of recruitment method.

Experimental session one. Survey materials for this study, and indeed for all studies in this research program, were developed using the Qualtrics Research Suite (Qualtrics, 2009). Upon entering the first experimental session participants were informed that they “would be asked a number of non-invasive questions about an important person in your life” and were presented with the relevant information pertaining to the ethical collection of human data. Participants were next told that the study’s aim is to “investigate important events and people in our everyday lives” and were requested to be honest and complete in their answers, which would be treated as strictly confidential.

Participants were then asked to provide the name of a SO of theirs. Specifically, there were told: “We would now like you to think about a person who

is very important to you and has been for many years. This could be a person who you would describe as a **significant other** and could be a close friend, romantic partner, or relative” (bold in original). They were then asked to list 12 different features that they would describe as characteristic of their SO. Three example features were provided (i.e., unsophisticated, impressionable, and ordinary) and using piped text participants were presented with 12 sentences to complete with a SO characteristic (i.e., “when I think of [SOs name] one feature I think of is...”). On the next page of the questionnaire participants were asked to choose 10 adjectives that are irrelevant to their SO from a list of 95. These were to be “characteristics that you would not say [SOs name] possesses, and that you would not say [SOs name] definitely does not possess”, again using piped text. The 95 adjectives were selected from Andersen’s (1968) list of 555 adjectives ordered by valence. The adjectives falling closest to the middle of the list were selected, with the exclusion of “clownish”, which was considered too anachronistic for the present audience and likely to rouse suspicion if presented across both experimental sessions. These adjectives were presented to participants as a single alphabetical list.

Subsequent to the characteristic listing and characteristic selection tasks, participants were asked to complete a PANAS mood measure (Watson, Clark, & Tellegen, 1988), which served to bolster the cover story of the study; the PANAS served as a plausible dependent variable that would help instill in shrewd participants the sense that experimental session one was indeed self-contained. This was followed by the collection of demographic information, including gender, first language, and year of birth.

The final two components of the questionnaire were an open ended response field, asking participants what they perceived the study to be about, as

well as an interim debrief consisting primarily of confidentiality information and other ethical considerations.

Experimental session two. After a delay of two weeks participants were sent an email inviting them to participate in the ostensibly unrelated second study. In that two week period the SO features that were listed in session one were prepared for use in session two. Specifically, the responses of participants were paraphrased in order to prevent immediate recognition if presented to participants a second time, while preserving the same meaning. The paraphrasing also removed spelling errors and introduced a consistent grammatical approach. For instance, “warmth” became “is warm”, “down to earth” became “is grounded”, and “HOT!!!” became “is attractive”.

Upon entering the second experimental session participants were informed that the objective of the study was to “explore how we form impressions of people” and in particular “how perception of a person changes in light of new information”. Participants were also presented with the relevant information pertaining to the ethical collection of human data. On the next page of the questionnaire, participants were given the instructions for a recognition task. Participants were told that they would be presented with information about two people, Person A and Person B, and that they should attempt to memorise this information as they would be asked to later retrieve that information in a brief memory test. The information about Person A and Person B was said to have been generated by asking members of the community to engage in some self-description tasks, and participants were informed that they would be presented with 20 descriptors to learn in total; 10 relating to Person A and 10 relating to Person B, where descriptors would be presented one at a time for eight seconds each, alternating

between Person A and Person B. Descriptors were then presented to participants in the form of “Participant A is warm”, “Participant B is grounded”, “Participant A is attractive”, etc.

It is at this point that the two experimental manipulations occurred. In relation to the intraclass distance manipulation, characteristics were presented to participants such that across the three experimental conditions there were different quantities of shared characteristics between Person A (i.e., the newly encountered target) and the participant’s SO. Specifically, in the low intraclass distance condition six shared characteristics were embedded within the list of 10 descriptors, in the medium intraclass distance condition three shared characteristics were embedded with the list, and in the high intraclass distance condition no shared characteristics were embedded within the list. In line with the yoking procedure, where participants’ SO characteristics were not selected characteristics from a paired participant’s SO took their place. The remaining four characteristics were taken from the characteristics identified by participants as irrelevant during session one. All Person A characteristics were presented in random order.

In relation to the interclass distance manipulation, characteristics were presented such that across the two experimental conditions there were different quantities of shared characteristics between Person A and Person B. Specifically, in the low interclass distance condition four shared characteristics were embedded within the list of ten Person B descriptors, and in the high interclass distance condition no shared characteristics were embedded within the list. These shared characteristics between Person A and Person B were presented immediately after one another in an attempt to strengthen the manipulation, and the shared

characteristics were either presented comparatively early in the list or comparative late in an attempt to avoid possible order effects (i.e., the shared characteristics were either located as the first, fourth, sixth and seventh positions, or the fourth, sixth, ninth and tenth positions). The remaining Person B characteristics were randomly taken from the characteristic selections of other participants.

On some occasions there were additional naturally occurring shared characteristics between a participant's SO and Person A, and between Person A and Person B. These were rare, however, and thus not considered to be a problem for the study. In fact, given that some degree of characteristic overlap would be anticipated with any two people, this could be interpreted as representing a move toward ecological validity.

Before being introduced to the test phase of the recognition task participants were given a two minute distractor task. This took the form of a find-a-word, where participants were asked to find and record as many words as possible, after which the instructions for the test phase were provided. Participants were told that they would "be presented with 20 sentences that either were, or were not, presented about Person A" and that their task would be "to, as quickly as possible, indicate whether they think the sentence was or was not presented about Person A." Participants were told that their response speed was being timed, and were asked to use the "A" key to indicate that a sentence was earlier presented about Person A and the "L" key to indicate that a sentence was not earlier presented about Person A. Three practice questions were provided to familiarise participants with the response interface, and in these practice questions participants were informed of how long they took to respond to each;

the purpose of this timing feedback was to reinforce to participants the timed nature of the exercise.

After the test phase of the recognition task participants completed a PANAS, which again served as part of the cover story for the study and as a source of data for the undergraduate participants. The questionnaire also included another open ended response field asking participants what they perceived the study to be about, and the same debrief as was made available in session one.

Manipulation checks. Two permutations of Aron, Aron and Smollan's (1992) Inclusion of Other in the Self (IOS) Scale were used to monitor the effectiveness of various manipulations (see Figure 6.2 for an example). First, to test whether selected SOs were indeed people close to participants, an IOS Scale was administered in the session one questionnaire immediately after the irrelevant characteristics selection task. There participants were asked to indicate the level of closeness between oneself and the person they nominated. Next, to test whether the interclass distance manipulation affected the experienced relationship between Person A and Person B (i.e., that smaller interclass distance led to Person A and Person B being experienced as closer), a modified IOS Scale was administered in the session two questionnaire immediately after the test phase of the recognition task. There participants were asked to indicate the level of closeness between Person A and Person B. After this participants were also asked to indicate on a separate sliding scale how similar they thought Person A and Person B were, where the scale anchors were "not at all similar" and "extremely similar".

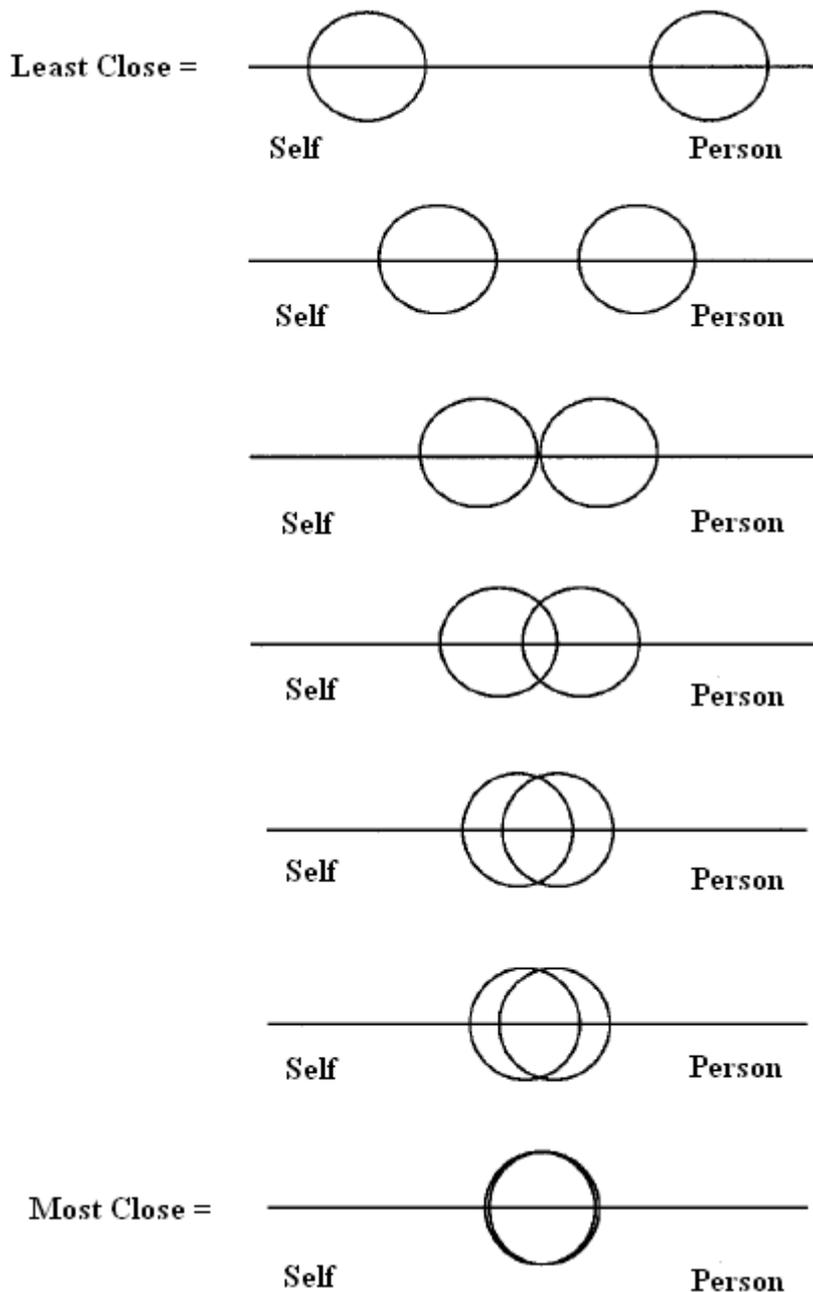


Figure 6.2. The IOS Scale as presented to participants in the first experimental session. In the second experimental session another modified IOS scale was presented with the labels “Person A” and “Person B”.

Dependent measures. There were four dependent measures used in the present study, the first of which being the classic false positive recognition measure. As per the standard transference methodology, in the 20 sentences

presented to participants during the test phase six of those sentences were not presented in the learning phase but were paraphrased descriptors of participants' SOs (the remaining four sentences were constructed using the irrelevant descriptors selected in session one). As part of the test phase, immediately after the timed recognition task, participants were asked to indicate their level of confidence that each sentence was presented about Person A. The sentences were presented together in a randomised order, and participants were asked to respond on a sliding scales where the scale anchors were "I am very confident that this statement was NOT presented about Person A" and "I am very confident that this statement was presented about Person A". Responses toward the *was presented* scale anchor for the SO sentences not presented during the learning phase indicate the greater presence of a false positive response style and evidence of transference.

The second dependent measure was a response time measure. Specifically, participants' response times during the test phase for the SO sentences not presented during the learning phase were recorded and compared across conditions, where longer response times were taken as evidence of transference. This follows the reasoning of Smith and Henry (1996), themselves following Aron, Aron, Tudor and Nelson (1991), who argued that responding to social stimuli will be more difficult when there is an inherent inconsistency to those stimuli. Here transference generates inconsistencies for participants because the SO sentences not presented during the learning phase are true of participants' SOs but are not true of Person A. Thus, much like the Stroop effect, in comparison to participants who are only answering in the context of Person A, transference should make it

more difficult to quickly establish whether a sentence was or was not presented about Person A.

The third dependent measure was participants' error rates for the timed responses, which again follows the reasoning of Smith and Henry (1996) and Aron, Aron, Tudor and Nelson (1991). More frequent errors were taken as indicative of transference based on the expectation that the contradiction created by the role of SOs in generating an impression will increase the difficulty of the recognition task.

The final dependent measure was another permutation of the IOS scale. Here participants were asked to indicate the level of closeness between oneself and Person A, where higher closeness ratings were taken as evidence of transference. This was based on the expectation that newly encountered targets who are experienced as akin to a close SO are also likely to be experienced as close to the self. This is consistent with the finding that transference can generate congruencies in patterns of interpersonal motivations and interaction between SOs and newly encountered targets (Andersen et al., 1996; Baum & Andersen, 1999; Berenson & Andersen, 2006; Berk & Andersen, 2008; Brumbaugh & Fraley, 2006; Hinkley & Andersen, 1996; see Chapter 2).

Results

Participant attrition

Many of the 682 session one participants could not be included in session two because their responses could not be used to generate the necessary stimuli for the recognition task. This was often due to participants not providing a full 12 SO characteristics, or exiting the questionnaire before selecting the 10 irrelevant characteristics. On other occasions participants' session one responses were simply not suitable for the present purposes (e.g., the characteristics of one

participant's SO, "the Lord", did not translate well), which also prohibited inclusion in session two. Attrition across the two experimental sessions for these and similar reasons was more of an issue for those participants recruited through social media. In terms of those recruited through the undergraduate research participation program, for pedagogical reasons all participants were invited to complete the second questionnaire irrespective of their session one responses, where stimuli for these participants was generated using other participants' session one responses.

With regard to attrition within experimental session two, of the 100 participants who were included in both experimental sessions, 10 were excluded from the analysis because they did not complete the questionnaire, five were excluded at the request of the participant, and one was excluded because they had become suspicious as to the true purposes of the study. In the end approximately 12% of the total participant pool, or 84 participants, could be included in the analysis, with some further reductions for particular dependent measures. This high attrition rate creates challenges for any subsequent analysis, as in the present field of study a six cell design with only 84 participants is likely to be underpowered. Nonetheless, given that data collection avenues had been largely exhausted for the immediate timeframe, the analysis proceeded with the potential power limitations in mind.

Manipulation checks and integrity of study pretence

For ease of interpretation responses on the modified seven point IOS scale were coded such that -2 corresponded to a response with greatest distance between the relevant two figures, 0 corresponded to a response where the two figures were only just in contact, and 4 corresponded to a response where the two figures overlapped completely. In this way responses greater than 0 could be taken

as indicative of a degree of felt closeness between the two entities being represented. Thus, in session one participants reliably indicated that they indeed felt close to their nominated SO, $M = 2.21$, $SD = 1.14$, $t(83) = 17.78$, $p < .001$, 95% CI [1.97, 2.46]. Indeed, only one participant indicated that they felt distant from their SO, and only three participants selected the just in contact option.

With regard to session two, the interclass distance manipulation had a significant effect on the speculated closeness between Person A and Person B, $t(81) = 3.17$, $p < .01$, 95% CI_d [0.28, 1.23], where participants in the low interclass distance condition suggested that Person A and Person B were closer ($M = 1.08$, $SD = 1.06$) than participants in the high interclass distance condition ($M = 0.32$, $SD = 1.09$). The interclass distance manipulation also had a significant effect on the perceived similarity between Person A and Person B, $t(81) = 3.32$, $p < .01$, 95% CI_d [4.81, 19.23], where participants in the low interclass distance condition perceived Person A and Person B to be more similar ($M = 44.47$, $SD = 16.51$) than those in the high interclass distance condition ($M = 56.49$, $SD = 16.04$)⁶. Finally, in the allocated open ended response field provided, the vast majority of participants did not indicate that they had detected the true nature of the study or the nature of the connection between experimental session one and two.

Bivariate correlations among the four dependent measures were investigated. False positive confidence was found to be correlated with false positive errors, $r(82) = .62$, $p < .001$, and no other significant correlations were observed. This can be taken as evidence of convergent validity among these two variables, although ideally all four variables would have been correlated with one another, with negative correlations between response times and the other three

dependent measures. That being said, it was also the case that no correlations were observed that ran opposite to expectations.

Main analysis

A 3×2 MANOVA was used to test for the predicted main effect of intraclass distance (H1) and the predicted interaction effect between intraclass distance and interclass distance (H2) on the four dependent measures. As per the convention for time response data of this kind (Coats, Smith, Claypool, & Banner, 2000), prior to this analysis, and all other analyses in this thesis, all values smaller than 300ms and greater than 5,000ms were excluded from the timed response data (Ratcliff, 1993).

The predicted main effect for intraclass distance was not observed, $F(8, 142) = 0.41, p > .90$; Wilk's $\Lambda = 0.41$, partial $\eta^2 = .02$, and nor was the predicted interaction effect between intraclass distance and interclass distance, $F(8, 142) = 0.22, p > .90$; Wilk's $\Lambda = 0.98$, partial $\eta^2 = .06$. The main effect for the interclass distance manipulation was also not significant, $F(4, 71) = 1.18, p > .90$; Wilk's $\Lambda = 0.98$, partial $\eta^2 = .01$.

The null result for the main effect of intraclass distance occurred despite this being essentially a direct replication effort of a purportedly robust effect. This may be interpreted further evidence that the MANOVA analysis was indeed underpowered. Consequently, the main analysis was followed up with a *post hoc* search for possible non-significant but interpretable trends within the data. While certainly not reportable as supporting evidence for our hypotheses, the presence of interpretable trends would be relevant to follow up empirical efforts.

Post hoc trend analysis

In terms of the intraclass distance manipulation the pattern among means was not readily interpretable using the above theorising for any of the dependent variables (Table 6.1). In fact, in a number of cases the relationship among means ran directly counter to expectations. Specifically, increasing intraclass distance (i.e., fewer shared characteristics between the SO and target) corresponded to greater indications of transference for both the false positive confidence and the false positive error measures: participants in the high intraclass distance condition had the most false positive confidence ($M = 3.04, SD = 1.88$) and most false positive errors ($M = 1.46, SD = 1.32$), participants in the medium intraclass distance condition had less false positive confidence ($M = 2.81, SD = 2.22$) and fewer false positive errors ($M = 1.07, SD = 1.23$), and participants in the low intraclass distance condition had the least false positive confidence ($M = 2.40, SD = 1.94$) and the fewest false positive errors ($M = 0.81, SD = 1.58$).

With regard to the interclass distance manipulation, there was an interpretable trend for the response time measure only. Although not significant in light of the MANOVA, taken in isolation the participants took longer to respond to SO sentences not presented during the learning phase in the low interclass distance condition ($M = 1.36, SD = 0.56$) in comparison with the high interclass distance condition ($M = 1.12, SD = 0.33$), $F(1, 74) = 4.44, p < .05$; partial $\eta^2 = .06$. This would make sense if the presence of more shared characteristics between Person A and Person B created an additional categorisation scheme that included both people (i.e., a salient Person A and Person B category) that participants were using to understand the situation presented to them. The longer response would be attributable to this additional categorisation scheme consuming processing

resources. There were no interpretable patterns among means for the interaction between the two experimental manipulations.

Table 6.1

Pattern of means for study 1, transference and comparative fit

Measure	Experimental condition					
	Low intraclass distance		Medium intraclass distance		High intraclass distance	
	Low interclass distance	High interclass distance	Low interclass distance	High interclass distance	Low interclass distance	High interclass distance
	<i>M (SD)</i> (<i>N</i> = 14)	<i>M (SD)</i> (<i>N</i> = 12)	<i>M (SD)</i> (<i>N</i> = 18)	<i>M (SD)</i> (<i>N</i> = 12)	<i>M (SD)</i> (<i>N</i> = 14)	<i>M (SD)</i> (<i>N</i> = 10)
False positive confidence	2.40 (2.02)	2.39 (1.93)	2.70 (2.24)	2.96 (2.28)	2.89 (1.76)	3.25 (2.11)
Response time (s)	1.28 (0.45)	1.08 (0.26)	1.37 (0.70)	1.20 (0.42)	1.40 (0.50)	1.09 (0.30)
False positive errors	0.93 (1.49)	0.67 (1.72)	0.94 (1.20)	1.25 (1.29)	1.57 (1.16)	1.30 (1.57)
Person A to self closeness	0.21 (0.96)	0.58 (1.00)	0.22 (0.81)	0.25 (1.82)	0.36 (1.45)	0.50 (0.97)

Note. The uneven sample sizes across cells reflects the uneven exclusion of participants from analysis and the low number of participants retained for analysis overall.

Discussion

The obtained results did not support either H1 or H2. The anticipated main effect of intraclass distance was not found among any of the dependent measures, and nor was the anticipated interaction effect found between intraclass distance and interclass distance. This means that the classic transference finding that shared characteristics between a SO and a newly encountered target would lead to false positives, where SO characteristics are perceived to also be true of the target, was not replicated. Nor was there evidence of transference in the form of delayed response times or the anticipation of emotional closeness between SOs and the target. There was also no evidence that transference can be manipulated in accordance with the principle of comparative fit; the extent of transference was not shown to be also influenced by the presence or absence of shared characteristics between the target and other people in the frame of reference.

These null results make sense in the context of the limited power of the present study, which was a consequence of the substantial 88% attrition rate between experimental session one and the final analysis. This attrition rate reflects the co-occurrence of a comparatively complex methodology and the limited participant engagement to be expected from participants recruited through social media and later year undergraduate courses. A large number of participants did not choose to return for the second experimental session, while others did not complete the questionnaires in the very particular way that would allow for the use of their data (e.g., they listed fewer than 12 characteristics in session one, or the characteristics listed were facetious).

Because of the reduced power levels the main analysis was followed up with a *post hoc*, and strictly exploratory, trend analysis. Two patterns of note

emerged in this follow up analysis. First, there was some further indication that the interclass manipulation was functioning as intended: in addition to the manipulation check evidence, where low interclass distance led to increased perceived closeness and similarity between Person A and Person B, there were signs that participants in the low interclass distance responded more slowly to SO characteristics that were not present as Person A descriptors. One plausible interpretation is that the presence of a cognitive resource consuming categorisation scheme, comprising of Person A and Person B, essentially distracted participants from the task of discerning whether characteristics were or were not present in the Person A descriptors.

More critically, among the dependent measures there was no evidence of trends in the anticipated direction in relation to the intraclass distance manipulation. Indeed, if anything the pattern of means was in opposition to predictions, with increasing false positive confidence and false positive errors as intraclass distance increased. Because we have good reason to believe that participants were engaged in processing the potential relationship between Person A and Person B, a further possible explanation for the null result becomes apparent. It is possible that the mere presence of a second person in the session two scenario distracted participants from processing in terms of SOs across all experimental conditions. When it came to understanding Person A, the available perceptual lens of *like Person B* versus *unlike Person B*, may have been sufficient to lead participants away from an understanding based on *like my SO* versus *unlike my SO*. This would also explain the null result for the interaction effect between intraclass distance and interclass distance; intraclass distance cannot moderate a transference effect if there is no effect to be moderated.

This alternative explanation for the null results requires the classic transference effect to be more easily interrupted than previous research suggests. That is, transference could not be the inferential process of choice that it has been suggested to be elsewhere in the social psychology of transference. This is a largely empirical question, but there is some reason to believe that the transference effect should be robust in the presence of a second person during the learning phase of the experiment. Specifically, Andersen and Cole (1990), Andersen and colleagues (1995), and Brumbaugh and Fraley (2006) have all obtained results suggestive of transference using methodologies where more than one person was present during learning trials. Nonetheless, the notion that in this study the mere presence of person B was enough to interrupt transference raises possibilities in terms of further empirical directions, particularly with regard to perceiver readiness, and more specifically the present processing goals of perceivers.

If participants did indeed unconsciously choose not to use SOs in forming impression of people, instead choosing to explore comparisons between Person A and Person B, then this would suggest that in Study 1 we have unintentionally presented participants with a novel implicit task. That is, without our knowledge, and indeed without necessarily the knowledge of the participants, we may have presented stimuli which suggest that participants *should be* comparing Person A with Person B. This follows the same logic as has been fruitfully applied to the illusory correlation paradigm; there is evidence that the illusory correlation effect is at least partly attributable to a differentiation task that is implicit to participants in the classic methodology (Haslam, McGarty, & Brown, 1996; McGarty, Haslam, Turner, & Oakes, 1993). Specifically, and again without necessarily the conscious awareness of participants, presenting students with positive and negative

behavioural instances of two groups without further context leads participants to try and distinguish between the two groups in terms of positivity/negativity. The logic of this is perhaps best seen when phrased from the perspective of participants (see also Berndsen, Spears, van der Pligt, & McGarty, 2002; McGarty, 1999): why present us (i.e., the participants) with positive and negative information about these two groups, and little else, if the exercise is not about figuring out which is better? Applying the same perspective to the present study, this would translate to something like: why would Person A and Person B be presented together if not to learn something about the *relationship between the two*?

The influence of a particular tasks falls within the domain of perceiver readiness because perceiver readiness includes perceivers' current motives and goals. Here the implicit task may be seen as introducing a current motive or goal for participants (i.e., to discern the relationship between Person A and Person B). Because discerning the relationship between Person A and Person B is not helped by information about one's SO, we would expect little to no use of SO information in forming an impression of either of the two people presented to participants. In short, we would not expect transference. Overall then we can think of this explanation for our null results as a consequence of an inadvertent alteration of the perceiver readiness of participants. This, of course, is entirely consistent with our social identity based account of transference. In fact, if we had been able to manipulate perceiver readiness through experimental manipulation, and then observe predicted effects on transference, this would be another pathway by which the additional utility of our categorisation based account of transference may be demonstrated empirically; the social cognitive model of transference does

not include a perceiver readiness like component. Indeed, this is the very avenue pursued in Study 2 and Study 3 of the present empirical program.

Notes

1. Three social media tools were used for recruitment. These were Facebook and two online psychological research participation websites. In terms of those websites, one was hosted by In-mind Magazine (<http://www.in-mind.org/content/online-research>) and the other was hosted by Psychological Research on the Net (<http://psych.hanover.edu/Research/exponnet.html>).

2. Four participants declined to provide information about their age, and 16 participants were excluded from analysis (see participant attrition, this chapter). This means that the sample's age characteristics were calculated on the basis of data from 80 participants.

3. Five participants declined to indicate whether or not English was their second language, and 16 participants were excluded from analysis (see participant attrition, this chapter). This means that the sample's linguistic characteristics were calculated on the basis of data from 79 participants.

4. Because 16 participants were excluded from analysis (see participant attrition, this chapter) the sample's gender distribution was calculated on the basis of data from 84 participants.

5. Due to the absence of a clear theoretical rationale for doing so, no tests for gender differences were made in the present analysis, nor were any such test conducted in relation to Study 2 or Study 3 (Baumeister, 1988; see also Spears, 1994).

6. The sliding scale was coded as a 100 point scale, where 0 corresponded to “not at all similar” and 100 corresponded to “extremely similar”.

CHAPTER 7

STUDY 2 AND STUDY 3: TRANSFERENCE AND PERCEIVER READINESS

In the social categorisation account of transference that we have advanced, perceiver readiness is one of the three constraining factors that interact to determine whether a SO and target social category becomes salient. Perceiver readiness encompasses a perceiver's past experience, present expectations, current motives, values, goals, and needs. It is the relationship between transference and perceiver processing goals specifically that is investigated in Study 2 and Study 3 of the present empirical program. In Study 2 we set out to test whether the extent that SO information is used in impression formation may be attenuated by processing goals where SO information is unlikely to be relevant, while in Study 3 we set out to test the converse prediction, that the use of SO information in social perception may be *encouraged* when the social context is one where SO information is likely to be relevant.

The breadth of perceiver readiness means that much of what is studied in social psychology falls within the bounds of the concept. Despite this, within the social psychology of transference it is comparatively uncommon that empirical work touches directly upon perceiver readiness concerns. This can be attributed to the emphasis on chronic accessibility that has been a central theme in the transference literature. Recall from Chapter 2 that in the social cognitive model of transference SO representations are chronically accessible and that there is "considerable readiness" to apply these representations to newly encountered

people. This follows from the first social psychological forays into transference, where SO representations were anticipated to be particularly powerful sources of social inference (Andersen & Cole, 1990; Andersen et al., 1995), which has remained a recurring theme to this day in transference studies. Kraus and Chen (2010), for example, recently sought to empirically demonstrate that facial feature resemblance can generate transference effects, which they viewed as consistent with the expectation that “SO representations are among the first social constructs to be activated and used when forming impressions of new others” (p. 519).

The anticipation that SO representations are chronically accessible naturally limits interest in perceiver readiness concerns. It suggests that there will be little to no variability in relation to perceiver readiness factors. This is because if SO representations are indeed chronically accessible then there should be no expectation that the use of SOs as a basis for perception will vary as a function of the current state of the perceiver. This can be thought of as a kind of ceiling effect, where the impact of particular aspects of perceiver readiness (i.e., past experience and present expectations) negates any possible role for other aspects of perceiver readiness (i.e., current motives, values, goals, and needs). This is actually inconsistent, to some extent, with other influential areas of the social cognition approach. It is a recurring point within the social cognition literature that the processing goals of perceivers will play a large part in determining what lens those perceivers use to make sense of social stimuli (Bargh, 1989, 1994; Higgins & King, 1981; Macrae & Bodenhausen, 2000), where associated empirical work has shown, for example, that a perceiver’s current information processing concerns can moderate the use of particular social stereotypes in impression formation (e.g.,

Blair & Banaji, 1996; Macrae, Bodenhausen, Milne, Thorn, & Castelli, 1997; Pendry & Macrae, 1996; Spencer, Fein, Wolfe, Fong, & Duinn, 1998).

The expectation that transference would not be substantially affected by the present goals of the perceiver is also, of course, inconsistent with the social identity approach's emphasis on the adaptability and utility of social categorisation. In Chapter 3 we saw that within the social identity tradition the adaptability of the social categorisation process rests in large part on the idea that social categories draw our "attention to differences, and similarities, which are relevant *for the purposes at hand*" (Oakes & Turner, 1986b, emphasis in original). The notion that in social perception we first and foremost anticipate that new social targets will be predictable on the basis of our knowledge of those close to us, irrespective of our present purposes, jars with that adaptability theme. At the very least the alternative seems worth entertaining: that the use of SO information in social perception is variable to a similar extent as other sources of inference.

Here we take the social identity and social cognition traditions together then, and question the implicit position within the social cognitive model of transference that perceiver factors are a proverbial closed door for investigation. Instead, it is reasonable to expect that transference will vary in response to the full array of perceiver factors, including, for instance, perceiver processing goals. Here no ceiling effect would be present and variability would be expected as a function of the different experiences and expectations of perceivers, as well as the different motives, values, goals, and needs that perceivers bring with them into the perceptual process.

Study 2: The role of processing goals in transference

Study 2 can also be thought of as an attempt to address a methodological limitation of Study 1. Specifically, it can be thought of as an attempt to follow up a *post hoc* explanation with an *a priori* experimental investigation. The *post hoc* explanation, as introduced in Chapter 6, was that the obtained null results could be attributed to a methodological quirk whereby the perceiver readiness of participants to use SO information in impression formation was reduced by the introduction of an implicit task where SO information is unlikely to be helpful. In short, without intending it we changed the goal of the perceivers in impression formation in a way that reduced the likelihood of transference occurring. Thus, the *a priori* investigation is an attempt to deliberately introduce a novel processing goal for participants with the intention of reproducing, within predicted experimental conditions, similar null results. Consequently, Study 2 largely adopts the same design and methodological form as Study 1.

With regard to the specific hypotheses, the first can be retained verbatim; here too we predict that, in accordance with the existing social psychology of transference, memories of SOs will play a role in the perception of newly encountered people who share characteristics with those SOs (H1). Or once again phrased in terms of the social categorisation model of transference, reduced intraclass distance will increase the likelihood that a SO and target category will become salient and that consequent within class accentuation effects will lead to the perception that a greater number of SO characteristics are shared by the target.

With regard to the second hypothesis, in the present study we replaced H2 from Study 1, concerning interclass distance, with a hypothesis concerning perceiver readiness, and in particular the present goals of a perceiver. Within the

context of perceiver goals we chose to focus on a comparatively straight forward pattern of moderation. That is, although the present goals of a perceiver may be sensibly anticipated to affect transference in a variety of ways, here we simply aim to moderate the impact of the classic intraclass distance manipulation with an orthogonal perceiver goals manipulation. Specifically, we anticipate that a processing goal that is unrelated to participants' SOs will reduce the likelihood that in a low intraclass distance condition memories of SOs will play a role in the perception of newly encountered people (H2). This is because the use of SO information in social perception through categorisation is expected to be constrained by a variety of perceiver factors, including current goals, motives, and needs. Again, no such expectations are reflected in the social cognitive model of transference, which instead suggests that SO representations will be at all times chronically accessibly.

Method

Procedure overview. In line with the idiographic-nomothetic experimental procedure introduced in Chapter 2, and also outlined in the context of Study 1, participants were recruited for involvement in two ostensibly unrelated laboratory sessions. In this procedure the first experimental session requires participants to nominate and describe a SO of theirs, while in the second experimental session participants are required to perform a recognition test. As with Study 1 it is the second experimental session where the methodology is altered to accommodate our particular novel hypothesis (i.e., H2). Here an additional manipulation with two experimental conditions is introduced. In one experimental condition the session two questionnaire is introduced in exactly the same manner as in Study 1, which follows Andersen and Glassman (1996) and the bulk of empirical research

into transference within social psychology; in this condition session two is introduced as an impression formation task, where participants are told that the researchers are interested in the way people form impressions. In the other experimental condition, the session two questionnaire is still introduced as an impression formation task, however, an additional processing goal is introduced that is unrelated to participants' SOs. Specifically, participants are also asked to attempt to determine whether the target person is a fellow student of their university, or a student at another local university.

Participants and design. In an attempt to help avoid the substantial participant attrition rates experienced in Study 1, participants were not recruited through social media and instead were only recruited through an undergraduate research participation program. Through that medium 127 first year undergraduate psychology students at the Australian National University volunteered to participate. Of these, 119 participants completed the session one questionnaire such that they could be included in second phase of the study. Of those who were included in the second phase of the study, 100 returned to participate. Participants were randomly assigned to one of six experimental conditions in a three (intraclass distance: low/medium/high) by two (processing goal: control/irrelevant) between subjects factorial design. Participants ranged in age from 17 to 29 with an average age of 20, approximately 26% of participants had learned English as a second language, and 69% of participants were female¹.

Procedure. The differences between the present procedure and the procedure for Study 1 pertain to only participant recruitment and particular aspects of the second experimental session. In terms of recruitment, participants were recruited from within a first year psychology course rather than from within

a third year psychology course. This reflected an attempt to further mitigate participant attrition; it was hoped that first year students would be less cynical about research participation and thus more likely to complete the questionnaires in good faith, as well as return for the second experimental session.

In terms of the second experimental session, reflecting the processing goal experimental manipulation, one half of the participants were randomly selected to be provided with instructions for the recognition task that were largely identical to those that were presented to participants in Study 1, with two exceptions: First, in this control condition the 10 descriptors for Person A were more vaguely said to have been generated from a “pilot study”, rather than specifically a “community sample”, and second, in the present study there was no reference in the instructions to a second person (i.e., Person B). The other half of participants were presented with instructions that introduced a processing goal where SO information was unlikely to be relevant. Here participants were told that the 10 descriptors for Person A were generated after having students from the Australian National University (participants’ own university) and the University of Canberra (another local university) engage in some self-description tasks. Participants were then told that, in addition to the brief memory test, they would be asked to identify which university Person A was a member of; they were told they would be asked “are they a UC student or are they an ANU student?” This question was located toward the end of the questionnaire so that all dependent variables completed before participants were asked to complete this task. Those four dependent variables again were: false positive confidence, response time, false positive errors, and Person A to self closeness. Naturally all manipulation checks relating to the

interclass distance manipulation in Study 1 were excluded from this study (i.e., questionnaire items relating to Person B).

Results

Participant attrition. Of the 127 session one participants, 8 could not be included in session two because their responses during session one could not be used to generate the necessary stimuli for the recognition task. Of the 100 session two participants, four were excluded from the analysis because they did not complete the questionnaire, while three were excluded because they had become suspicious as to the true purposes of the study. In the end approximately 73% of the total participant pool, or 93 participants, could be included in the analysis.

While the 27% overall attrition rate was a substantial improvement on the 88% attrition rate experienced in Study 1, the final sample size is still smaller than might be desired for a six cell design. On the other hand, the obtained sample size is larger, and in at least one case twice as large, than that used for numerous studies that were able to successfully replicate the classic transference finding using a comparable methodology (Berk & Andersen, 2008; Kraus & Chen, 2010; Kraus et al., 2010; Kruglanski & Pierro, 2008; Pierro & Kruglanski, 2008; Pierro et al., 2009). As such, it was decided to proceed with the analysis.

Manipulation checks and integrity of study pretence. As was the case with Study 1, responses on the modified seven point IOS were coded such that responses greater than 0 could be taken as indicative of a degree of felt closeness between the two entities being represented. In session one participants reliably indicated that they indeed felt close to their nominated SO, $M = 2.14$, $SD = 1.19$, $t(92) = 17.41$, $p < .001$, 95% CI [1.90, 2.38]. Only three participants indicated that they felt distant from their SO, and only five participants selected the just in

contact option. The vast majority of participants did not indicate that they had detected the true nature of the study or the nature of the connection between experimental session one and two.

Bivariate correlations among the four dependant measures were investigated. False positive confidence was found to be correlated with false positive errors, $r(91) = .76, p < .001$, and false positive errors were in turn correlated with Person A to self closeness, $r(91) = .26, p < .05$. While ideally the correlation between False positive confidence and Person A to self closeness would also have been significant, $r(91) = .147, p < .20$, but this was an improvement on Study 1 and it is possible to interpret these results as evidence of convergent validity among these three measures. Contrary to expectations, response times were not negatively correlated with the other three dependant measures, however, it was also the case that no significant positive correlations were observed.

Main analysis. A 3×2 MANOVA was used to test for the predicted main effect of intraclass distance (H1) and the predicted interaction effect between intraclass distance and processing goal (H2) on the four dependent measures. As was the case in Study 1, the predicted main effect was not observed, $F(8, 168) = 1.09, p > .35$; Wilk's $\Lambda = 0.90$, partial $\eta^2 = .05$, meaning we did again not replicate the classic transference finding. The predicted interaction effect also was not observed, $F(8, 168) = 1.34, p > .20$; Wilk's $\Lambda = 0.88$, partial $\eta^2 = .06$, nor was any main effect for the processing goal manipulation, $F(4, 84) = 0.96, p > .50$; Wilk's $\Lambda = 0.96$, partial $\eta^2 = .04$. As was the case in Study 1, the present main analysis was followed up with a post hoc search for interpretable trends.

Post hoc trend analysis. In contrast to Study 1, on this occasion the pattern among means was somewhat in line with the expectations of H1 (Table 7.1). Specifically, within the control condition for processing goal there were greatest indications of transference in the low intraclass distance condition: participants in the low intraclass distance condition displayed more false positive confidence ($M = 2.60, SD = 3.03$) than participants in the medium and high intraclass distance conditions ($M = 0.96, SD = 0.94$, and $M = 1.67, SD = 1.53$, respectively), had longer response times ($M = 1.17s, SD = 0.40s$) than participants in the medium and high intraclass distance conditions ($M = 1.09s, SD = 0.24s$, and $M = 1.12s, SD = 0.32s$, respectively), made more false positive errors ($M = 1.18, SD = 1.89$) than participants in the medium and high intraclass distance conditions ($M = 0.57, SD = 0.85$, and $M = 0.73, SD = 1.01$, respectively), and indicated greater Person A to self closeness ($M = 0.77, SD = 1.48$) than participants in the medium and high intraclass distance conditions ($M = 0.50, SD = 1.23$, and $M = 0.45, SD = 1.29$, respectively). Indeed, with regard to the latter, felt closeness, the pattern of means was such that decreasing intraclass distance consistently corresponded to greater indications of transference.

Overall the means within the control condition differed as anticipated when comparisons were made between the low intraclass distance condition and the medium and high intraclass distance conditions taken together. Consequently, a further post hoc MANOVA was conducted within the control condition for processing goal, with the medium and high intraclass distances combined into a single condition. The aim of this additional analysis was to test whether any of these trends reach traditional standards of statistical significance. That MANOVA was not significant, $F(4, 42) = 0.07, p > .95$; Wilk's $\Lambda = 0.993$, partial $\eta^2 = .01$.

Within the irrelevant condition for processing goal the pattern among means was not readily interpretable. Here, following H2, in comparison with the control condition we would have anticipated greater homogeneity among means due to the processing goal that rendered SO information likely irrelevant; here the processing goal was expected to lessen the impact of the intraclass distance manipulation. Instead, we observed greater mean differences than obtained in the control condition, where the nature of those mean differences was not consistent across the dependent measures.

Table 7.1

Pattern of means for study 2, the role of processing goals in transference

Measure	Experimental condition					
	Low intraclass distance		Medium intraclass distance		High intraclass distance	
	Control	Irrelevant	Control	Irrelevant	Control	Irrelevant
	<i>M (SD)</i> (<i>N</i> = 22)	<i>M (SD)</i> (<i>N</i> = 16)	<i>M (SD)</i> (<i>N</i> = 14)	<i>M (SD)</i> (<i>N</i> = 14)	<i>M (SD)</i> (<i>N</i> = 11)	<i>M (SD)</i> (<i>N</i> = 16)
False positive confidence	2.60 (3.03)	1.70 (2.00)	0.96 (0.94)	2.27 (1.92)	1.67 (1.53)	3.14 (2.36)
Response time (s)	1.17 (0.40)	1.16 (0.40)	1.09 (0.24)	1.13 (0.36)	1.12 (0.32)	0.97 (0.29)
False positive errors	1.18 (1.89)	0.63 (1.31)	0.57 (0.85)	0.86 (1.03)	0.73 (1.01)	1.50 (1.93)
Person A to self closeness	0.77 (1.48)	0.94 (1.44)	0.50 (1.23)	-0.27 (1.20)	0.45 (1.29)	0.44 (1.15)

Note. The uneven sample sizes across cells reflects the uneven exclusion of participants from analysis and the low number of participants retained for analysis overall.

Discussion

In our main analysis the results mirrored those obtained in Study 1; neither H1 nor H2 were supported. The anticipated main effect of intraclass distance was not found among any of the dependent measures, and nor was the anticipated interaction effect between intraclass distance and processing goal.

The failure once again to replicate the classic transference finding occurred despite successful efforts to reduce attrition and therefore maintain statistical power. That is, although attrition was reduced from 88% to 27% and the study's sample size exceeded that of numerous other comparable studies, null results were still obtained. Moreover, the null result for the classic transference finding was observed despite the elimination of the potential confound introduced in Study 1; the additional target person was not present and therefore there is no reason to speculate that a distracting implicit task was introduced to perceivers. Instead, the processing goal control condition followed the classic transference methodology without meaningful alteration. This suggests that the study was indeed underpowered. Thus a strictly exploratory *post hoc* exploratory trend analysis was conducted.

In that trend analysis results were marginally more in line with expectations. Within the control condition for processing goal, the pattern among the means for all four dependent measures was such that the greatest indications of a salient SO and target category were present in the lowest intraclass distance condition. Or put in the language of the social psychology of transference, the condition of where the SO and target shared the most characteristics, or were most similar, was consistently the most indicative of transference. Of course, in the context of the null results this cannot be taken as evidence that the classic

transference finding was in fact replicated, particularly given other inconsistencies present among the means; specifically, for three out of the four dependent measures the high intraclass distance condition resulted in more indications of transference than the medium intraclass distance condition, rather than the expected converse pattern. Nevertheless, it does marginally increase the probability that the changes to the methodology between Study 1 and Study 2 were indeed working in the right direction. It is mildly suggestive that the minor improvement to the power of the study did indeed increase the chances of detecting a transference effect that, while small, is nonetheless present.

In terms of the manipulation of processing goals, the absence of detectable signs of transference in the control condition negated the opportunity to observe the attenuation of transference when a processing goal was introduced where SO information is unlikely to be relevant. As such, Study 2 does not serve as a suitable test of the notion that the salience of SO and target categories will be subject to perceiver readiness constraints in the same way that other social categories have been demonstrated to be. In other words, further empirical investigation is required, which brings us to Study 3².

Although introduced at the outset of the chapter as a parallel investigation to Study 2, in reality this period of the research program also unfolded sequentially, where the impetus behind Study 3 was to address the methodological limitations identified in the course of running that former study. There were two such limitations. The first, of course, is the statistical power limitation discussed immediately above, which we were not able to resolve between Study 1 and Study 2. The intention with Study 3 therefore was again attempt to replicate the classic

transference finding, and again investigate the possible constraining role of perceiver readiness factors, under conditions of still greater statistical power.

The second limitation pertains to the nature of our introduction of a perceiver readiness factor to the methodology. With twenty-twenty hindsight it was recognised that, although introducing a specific processing goal is an appropriate way in which the constraining role of perceiver readiness on transference might be demonstrated, introducing a processing goal expected to *attenuate* the extent of transference is only going to produce weak evidence for that role. This is because attenuating transference by way of a processing goal lends itself to the alternative explanation that the processing goal simply served as a distraction for participants. In other words, rather than leading participants to form an impression of the target by way of alternative categorisation schemes, the introduced processing goal might distract participants from the target entirely, or alternatively consume the cognitive resources that would otherwise be used to drive transference. In short, the addition of a processing goal might lead to alternative categorisation of the stimuli, but it might also lead to the cessation of categorisation of the stimuli, where both of these mechanisms would result in reduced transference. Study 3 resolves this by seeking to demonstrate that processing goals can *intensify* transference from a baseline level; an observed intensification of transference does not lend itself to an alternative explanation in terms of distraction or cognitive resource limitations.

Study 3: The role of processing goals in transference, mark two

To recap, a SCT based social categorisation model of transference would suggest that the salience of SO and target categories should be constrained by perceiver readiness factors, such as the processing goals of the perceiver.

Perceivers should thus be expected to categorise newly encountered people in relation to their SOs to a greater extent when there are contextual cues present that suggest to perceivers that understanding social stimuli through that lens would be useful. This is the expectation to be tested in the present study. That is, in addition to once again attempting to replicate the basic transference finding that memories of SOs play a role in the perception of newly encountered people who share characteristics with those SOs (H1), the present study tests the prediction that the extent of transference will be *greater* when processing goals are more relevant to SO memories (H2). Or put in the language of our SCT based model, an inclusive SO and target category will be likely to become salient if that categorisation scheme is deemed likely to be useful in the present context.

But how is one to introduce processing goals that are known to be relevant to each participant's distinctive SO? To introduce a unique processing goal that corresponds to each SO is likely to introduce confounds, while on the other hand identifying a processing goal that is relevant to all SOs would seem on the face of it implausible. A clue toward a possible solution is provided in the following example of goal driven social perception:

An alluring individual in a white coat can variously be categorised as a doctor or a dream date depending on whether one is seeking medical attention for a persistent throat infection or looking for a partner to take to the end of semester wine and cheese party. Interactional goals clearly affect one's conception of others. (Pendry & Macrae, 1996, p. 249)

Pendry and Macrae describe the search for a romantic partner as a potential processing goal for social perception. Romantic partners are also a common choice for participants in transference studies when they are asked to nominate a SO. It is

this commonality that provides the opportunity needed to introduce a single processing goal that is likely to be uniformly relevant across multiple SOs. What is required is simply to be mildly selective about what type of SOs are of interest in the present study, to further access that romantic partner commonality, and then to identify a suitably plausible processing goal relating to romantic partners; one that does not expose the nature of the study to participants. This is the methodological intention of the present study, which otherwise follows the classic transference methodology. In the first experimental session participants were asked to nominate five SOs, and then indicate whether any of those were a current romantic partner. If a romantic partner was nominated, participants were then asked provide information about that particular SO. In the second experimental session processing goals are manipulated by either introducing the questionnaire in the standard fashion (i.e., as an impression formation task) or by introducing the questionnaire as a mock online dating exercise, where a romantic partner is more relevant to a dating exercise than to general impression formation.

Introducing a processing goal that is expected to facilitate transference, via a mock dating exercise, creates an opportunity for a further test of the social categorisation model of transference. Under this model not only would we expect a mock dating exercise to increase the relevance of SOs who are romantic partners, but we would also expect a mock dating exercise to increase the relevance of *particular memories* of those SOs. This is because the social categorisation model of transference rejects the idea of SO representations that are static entities that are stored in memory to be subsequently applied in a unitary fashion. Instead, and also in line with connectionist theorising, we anticipate that there is a fluid dimensionality to SO memories (see Chapter 5) and that those memories can

consequently be drawn upon in any number of ways. This means that it should be possible for SO memories of greater situational relevance to be able to be leveraged with some independence from less relevant SO memories. This idea is perhaps better understood from the perspective of the output of the categorisation processes, the salient social category. Because we are departing from the social cognition approach's category activation and application model, in favour of an online category formation perspective, we can get away from thinking about a social category as a pre-prepared answer. Instead, the expectation would be that the salient SO and target social category is a highly bespoke cognitive creation; one that "is not a set of fixed attributes applied in an all or none manner, but is shaped selectively by the context of its application" (Oakes et al., 1994, p. 123). Said otherwise, in addition to expecting the *extent* of transference to be greater under conditions of relevance, we may sensibly expect the specific *nature* of that transference to be affected by relevance. Translating this into a testable hypothesis for the present study, we predict that, within the same romantic SO source, stereotypically romantic SO characteristics will be more likely to be used in transference than non-stereotypically romantic SO characteristics (H3).

The final unique contribution of the present study concerns the statistical techniques utilised, which is a response to the need to conduct a test of the social categorisation model of transference under conditions of greater statistical power than achieved in either Study 1 or Study 2, where small and unequal cell sizes were experienced. While participant recruitment of course remains a key area of focus, in the present study this issue is further addressed by leaving behind aggregate comparisons and ANOVA as the analysis tool for hypothesis testing. Instead, a mixed logit model analysis (i.e., multilevel logistic regression) is adopted, which

has been shown to have more power than traditional ANOVA analysis, as well as be better equipped to avoid identifying spurious effects (Jaeger, 2008).

A mixed logit model analysis also introduces the opportunity to perform a signal detection analysis (SDT) (Wickens, 2001), which would be infeasible under the sample size constraints that were experienced in Study 1 and Study 2 (see also DeCarlo, 1998; Van Rooy, Vanhooissen, & Van Overwalle, 2013). SDT provides a more rigorous test of the underlying memory construct in play during transference. Transference is theorised to occur due to the heightened activation of SO information, which is complicated by the fact that one would expect to find in most circumstances a memory advantage for items that are part of a SO description, regardless of any additional context manipulation. By using SDT analysis it is possible to identify genuine enhanced item-memory. SDT achieves this by measuring participants' ability to distinguish between "signal" and "noise". This is operationalised in terms of the difference between hits (correct 'yes' responses) and false positives (incorrect 'yes' responses), also referred to as d' . This measure, d' , is well established as a reliable measure of genuine item-memory: The higher d' , the more accessible the signal, or memory construct, that is driving the responses. In typical transference studies, d' is not used. The presence of transference is typically determined on the basis of false positive confidence, the occurrence of false positives, or, at best, the sum of hits and false positives. In order to rule out experimental priming of SO characteristics the transference literature has thus far relied solely on the two-week delay between SO feature listing and the memory test (Andersen & Baum, 1994; Andersen et al., 1995). As such, it is premature to claim, based on those results, that it is in fact SO information in memory that is driving the transference effect. For instance, perceivers may simply

be more willing to say 'yes' to particular types of information that might be related to a SO, because that information is more familiar (Labiouse, 2004). In other words, transference might be due to a general bias rather than enhanced item-level memory for SO information. Thus, the claims that perceivers "misremember" target information or that "false memories" are created when a new person resembles a SO might be unsubstantiated.

Method

Procedure overview. Once again the present study follows idiographic-nomothetic experimental procedure introduced in Chapter 2 and utilised for Study 1 and Study 2, with specific alterations to reflect particular hypotheses. Broadly speaking the specific alterations were a) in session one to screen out participants that did not nominate a romantic partner as a SO, b) in session one to ask participants to rate how stereotypically romantic each nominated SO characteristic was, c) in session two to include a processing goal experimental condition where the questionnaire is introduced as a mock online dating exercise, and d) to further tailor the dependent measures to suit.

Participants and design. Although we were wary of the challenges experienced in Study 1, the timing of the present study was such that social media was the most appropriate recruitment method available. Through that medium 258 individuals volunteered to participate, and those individuals were directed to an online screening survey. Individuals who did not nominate a significant current or previous romantic partner as a SO, or who did not fully complete the screening procedure, were excluded from further participation. The remaining 108 individuals were randomly assigned to one of four experimental conditions in a two (intraclass distance: low/high) by two (processing goal: control/relevant)

between subjects factorial design. Of those who were included in the second phase of the study, 64 returned to participate. Participants ranged in age from 17 to 28 with an average age of 22, all participants were native English speakers, and 50% of participants were female³.

Procedure. On this occasion the first survey session was introduced as a survey about “significant people in your life” and participants were informed that they would be asked to provide personal information about their relationships. After collecting demographic information (i.e., native language, gender, age, nationality, and occupation), participants were asked to list five SOs, or “persons who may be living or dead but who are currently significant and important to you”, and then rank those SOs in order of their current significance. To screen out persons who did not nominate a romantic SO, participants were then asked if they shared a romantic relationship (current or previous) with one of these five SOs. Participants whose list of five SOs did not include anyone with whom they had a romantic relationship were thanked, debriefed and instructed to close their survey window.

Participants who did share a romantic relationship with one of their five SOs were asked to generate a list of eight “characteristics, qualities or faults” that describe that person. These eight descriptors were then re-presented to participants who were asked to assess on a three-point scale the degree to which each descriptor was stereotypical of a romantic role⁴. Participants were then asked to choose 12 traits from the usual list of 95 adjectives that they felt were neutral or irrelevant to their SO⁵. As per the Study 1, participants were thanked and asked if they would be interested in participating in a second, largely unrelated study,

relating to “how we encode information about people we meet for the first time”.

Participants who were interested were asked to provide an email address.

In session two, reflecting the processing goal experimental manipulation, one half of the participants were randomly selected to be provided with instructions for the recognition task that were similar to those that were presented to participants in Study 1. This was the control condition and here the questionnaire was introduced as an impression formation survey where “a number of characteristics of an individual will be presented. You will be asked to memorize this information, and will be asked to retrieve the information in a memory test later on.” The other half of participants were presented with instructions that introduced a processing goal where SO information was likely to be relevant. In the task relevant condition the following more elaborate cover story was presented:

This person has made their information available anonymously via a recruiting website to help with the current research into how people process information about new acquaintances. This person is a member of an online dating service and has provided us with a brief description of themselves. This personal description is posted on their profile page and is included in all emails to prospective dating partners. We want you to imagine you are approached by this person via email. Read the personal description as if you were seriously considering whether or not to meet this person in a romantic/dating capacity. Do they seem attractive to you? We want your opinion of them as a person hypothetically available to you as a potential romantic partner.

Following this introduction to the task, or the control introduction, all participants were then presented with a short statement presumably written by the target person. This statement was comprised of eight randomly ordered characteristics. For participants in the low intraclass distance condition, four of those characteristics were drawn from their session one descriptors of their SO, while for participants in the high intraclass distance condition, as per the yoking procedure, those four characteristics were drawn from another participant's session one SO descriptors. The remaining four characteristics of the target were randomly selected from among those characteristics identified as irrelevant to a SO in the session one survey. On such statement, for example, read "Hello. I am a romantic, smart, yet disorganised person. At times I can be a bit of a perfectionist yet generally I am a normal, lucky person even if I am a little inexperienced. I would also describe myself as tall". The eight characteristics were then restated in list form and participants were instructed to commit the characteristics of the target to memory in preparation for the recognition task.

That recognition task was presented after the usual distractor. In that task each participant was given essentially the same instructions as for Study 1 and Study 2, and then was sequentially presented with 24 randomly ordered characteristics. Those 24 characteristics comprised of the eight characteristics presented during the learning phase, as well as 16 characteristics that were not presented during the learning phase. Of those not presented during the learning phase, at least four were characteristics from the participants own SO descriptions (with eight own SO characteristics included for participants in the high interclass distance condition), while the remaining distractor items were drawn from the

participants own nominated irrelevant items and where necessary another participant's SO descriptions.

In the interests of managing Type I error risk (Simmons, Nelson, & Simonsohn, 2011), here the dependent measures for the present study were limited to those that were most appropriate given the mixed logit model analysis. These were all based on the participant choices made during the recognition task (e.g., the false positive rate and d'). The IOS manipulation check was excluded from the present study in the interests of brevity and in light of the consistent results across Study 1 and Study 2, however, participants were still asked to offer their best guess as to the purpose of the research to ensure that they had not become suspicious as to the true nature of the study and the connection between experimental session one and two.

Results

Participant attrition. Of the 258 session one participants, 150 could not be included in session two either because they did not sufficiently complete the session one questionnaire, because their responses during session one could not be used to generate the necessary stimuli for the recognition task, or because they did not nominate a SO who was a current or previous romantic partner. Of the 108 participants invited to participate in session two, 64 participants returned. Of these, 12 participants were excluded from the analysis because they did not complete the questionnaire. In the end approximately 20% of the total participant pool, or 52 participants, could be included in the analysis.

While the 80% overall attrition rate is a return to the challenging attrition rate experienced in Study 1, which once again raises questions in terms of

statistical power, on this occasion the planned mixed logit model analysis means that the obtained sample size was far more likely to be sufficient.

Integrity of study pretence. None of the participants indicated that they had detected the true nature of the study or the nature of the connection between experimental session one and two.

Main analysis. The main analysis is reported below in three sections. The first reports the outcome of the comparably straight forward mixed logit model analysis of false positive rates as they pertain to H1, the classic transference finding, and H2, the impact of a relevant processing goal. In the second we report the outcome of the signal detection analysis pertaining to H1, which provides a test of whether the classic transference finding does indeed involve enhanced item memory. Finally, the third section reports our test of H3, that which specific SO characteristics are transferred is also shaped by processing goals.

Traditional transference false positive rate analysis. Multilevel modelling analyses usually are conducted via a series of model-building and comparison exercises, typically starting with a restricted model (for instance, an intercepts-only model) and then adding predictors according to the analyst's requirements. A Chi-square test is used to determine whether adding predictors significantly increases a model's ability to fit the data at hand. We will follow that approach below, beginning first with a test for the basic transference effect using the traditional analysis.

Our primary hypothesis was that the probability of a false positive would be greater in the low as opposed to the high intraclass distance condition. Consistent with traditional transference analyses, a false positive was operationalised as an incorrect response of 'Yes' to a recognition task item that was not presented as

part of the target in the learning task (i.e., a *distractor*, see Table 7.2).

Table 7.2

Response outcomes for different item types

Item type	Response	
	'No'	'Yes'
Target (1)	Miss	Hit
Distractor (2)	Correct rejection	False positive

Note. Numbers within parentheses indicate dummy coding used the models.

We start with a simple, restricted model that tests the linear relationship between the logit probability of a participant saying 'Yes' to a distractor item (i.e., a false positive) and intraclass distance (Distance; High intraclass distance = 0, Low intraclass distance = 1) and item source (SO; whether the item was taken from the participant's SO [SO = 1], or another source such as an irrelevant item or a yoked SO [Non-SO = 0]). Importantly, the beta coefficients reported for each variable are logits, which indicate the odds of a particular event (more details follow below), while the numbers reported in figures and tables are not logits and instead the average probability of a 'Yes' answer, which is more intuitive. As mentioned, we will start with a restricted model:

$$\text{Logit } (p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{SO}_{ij} + \beta_2 \text{Distance}_{ij} + e_{ij}$$

A significant main effect of item source was found $\beta_1 = .52, p < .05$, which indicates that participants were more likely to say 'Yes' (i.e., a false positive) to SO items.

More specifically, we can conclude that the odds of an incorrect answer for SO items is approximately .52 times (or $e^{0.52}$) higher than for non-SO items. There was no significant main effect of intraclass distance ($p > .1$); we therefore removed the term from the model. Instead, an intraclass distance by item source interaction term was added, which allows us to determine whether the probability of a false positive specifically among SO items (i.e., $SO = 1$) was moderated by intraclass distance, the basic prediction of transference:

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 SO_{ij} + \beta_2 (SO:Distance)_{ij} u_j + e_{ij}$$

As expected, including the intraclass distance by item source interaction term increased the model fit with the data; $X^2(1) = 3.68, p < .001$. The interaction was significant, $\beta_2 = 1.03, p < 0.05$, and the main effect for item source became non-significant ($p > .7$). As can be seen from Table 7.3., this significant interaction reflects a greater probability of a false positive in the low intraclass distance condition among SO items as opposed to non-SO items. This was not the case in the high intraclass distance condition. This supports H1 and is consistent with previous transference studies that claim participants make extra, SO-consistent attributions about a target when that target shares characteristics with a SO. Further, as the main effect of item source became non-significant when the interaction term was included, we can safely infer that the impact of item source was moderated by intraclass distance.

Table 7.3.

Probability of false alarm as a function of intraclass distance and SO

Item source	Intraclass distance	
	High (SD) [0]	Low (SD) [1]
Non-SO item [0]	0.11 (0.31)	0.08 (0.28)
SO item [1]	0.10 (0.30)	0.14 (0.34)

Note. Numbers within square brackets are values of dummy codes in model.

The next stage in the analysis was to test whether processing goal moderated the probability of a false positive, and if so, among which items. Adding a term for processing goal to the model (Goal; Control = 0, Goal relevant = 1) did not improve the fit of the model ($p > .7$). However, adding the interaction between processing goal and SO did improve the fit of the model, $X^2(1) = 5.1702, p < .05$:

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{SO}_{ij} + \beta_2 (\text{SO} \times \text{Distance})_{ij} + \beta_3 (\text{SO} \times \text{Goal}) + e_{ij}$$

The interaction was significant, $\beta_3 = 0.96, p < 0.05$ and Figure 7.1 shows that within the goal relevant condition the probability of false positives was higher for SO items than for non-SO items. It also shows that *between* processing goal conditions false positives among SO items were higher in the goal relevant condition. This is consistent with our hypothesis that SO derived false positives would be more likely when the SO is in some way relevant to the task at hand. Within the processing goal control condition almost no difference in error between

items of varying sources was found; without the dating exercise task, information relating to the romantic SO was no more important than other information.

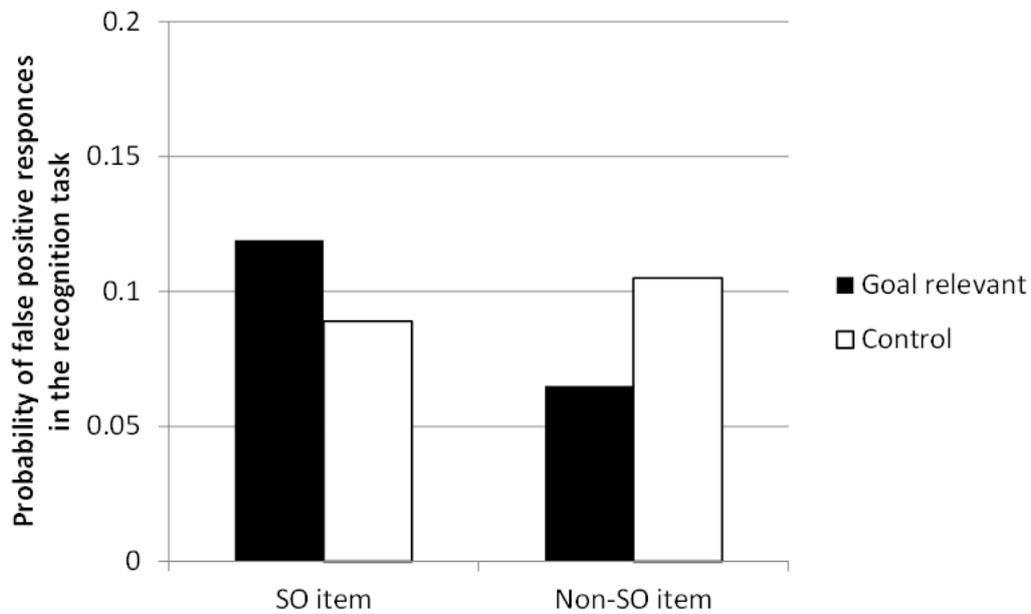


Figure 7.1. Average probability of a false positive as a function of goal relevance and item source.

Adding the three-way interaction between SO, goal relevance and intraclass distance did not improve the fit of the model, $p > .1$. However, a trend was present suggesting that the relative difference between SO item false positives and non-SO item false positives was largest in the low intraclass distance by task relevant condition (Figure 7.2).

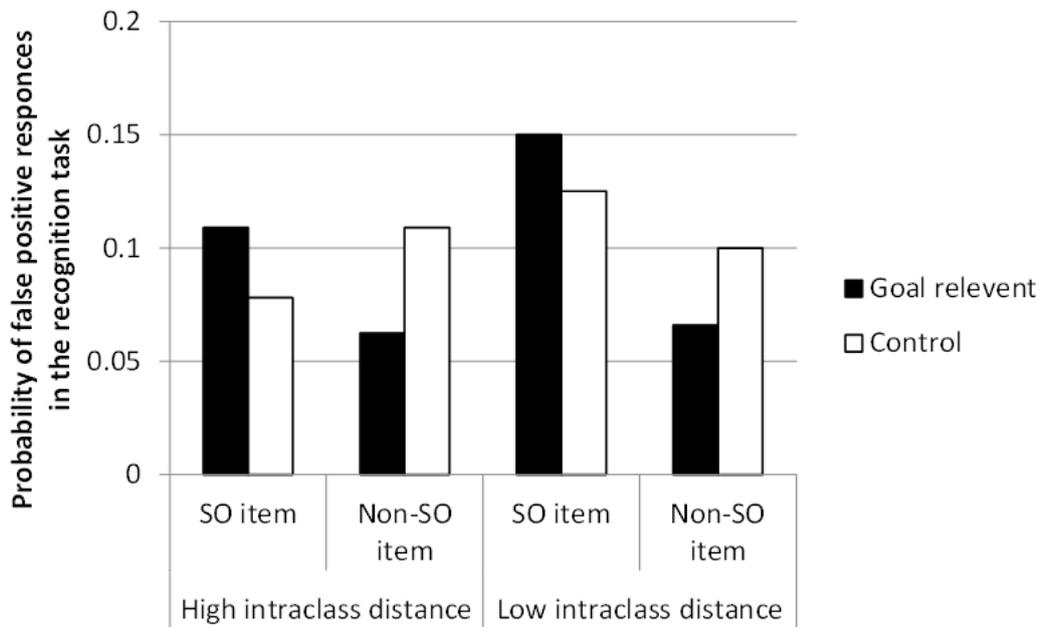


Figure 7.2. Average probability of a false positive as a function of processing goal, item source, and intraclass distance.

Signal Detection Analysis. Turning to our signal detection analysis, we investigated whether discriminability was reduced within the low intraclass distance condition among SO items compared to non-SO items. As mentioned previously, discriminability, as measured by d' , provides a reliable measure of genuine item-memory. If SO information in memory is indeed used in the low intraclass distance condition then participants should be less able to distinguish between target items and distractors when the item is from a participant's own SO in comparison to when it is not. This is in line with schema research where higher false positive rates are attributed to memory confusion between inferences from data and traces of observed stimulus features (e.g., Fiske & Pavelchak, 1986; Locksley, Stangor, Hepburn, Grosovsky, & Hochstrasser, 1984). As previously explained, the coefficient of interest for the logistic model is the log of the odds ratio, $\ln(\text{OR})$. Conceptually, $\ln(\text{OR})$ can be thought of in a very similar way to d' .

While $d' = z(\text{hit rate}) - z(\text{false positive rate})$, $\ln(\text{OR}) = \ln(\text{odds of a hit}) - 2 \ln(\text{odds of a false positive})$. An approximate relationship between them is $\ln(\text{OR}) \approx 1.6d'$. As with the previous analysis, the units for all the β values we report are logits, though for graphing the data we use the probability of participants responding with 'Yes'.

As above, the analysis begins with a comparably simple model, with variables for item category (Target; Target = 1, Distractor = 0) and item source (SO; OwnSO consistent = 1, OwnSO inconsistent = 2) included.

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{Target}_{ij} + \beta_2 \text{SO}_{ij} + e_{ij}$$

A main effect of target was found, $\beta_1 = 3.95$, $p < .001$ reflecting a higher rate of hits overall than false positives. That is, participants recognised target items more than distractor items and were not responding 'yes' to everything. A main effect for item source was significant, $\beta_2 = 0.58$, $p < .05$, reflecting a general bias to respond with 'Yes' to SO items (which is in line with the preceding analysis of false positives). The addition of a processing goal variable to this model did not significantly improve the model fit, $p > .1$, and was thus removed from further analysis. The next model included the interaction between item type (Target) and item source (SO):

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{Target}_{ij} + \beta_2 \text{SO}_{ij} + \beta_3 (\text{Target} \times \text{SO})_{ij} + e_{ij}$$

Including the interaction term significantly increased the model's fit to the data, $X^2(1) = 3.74$, $p < .053$, which indicated that item source significantly moderated the difference between the probability of hits and false positives. The main effect of

item source still significantly moderated accuracy, $\beta_2 = -1.15, p < 0.05$, but now acted in the opposite direction. Critically, in support of our primary transference hypothesis, this suggests that participant's ability to distinguish target items from distractor items was *reduced* when they were descriptive of a participant's SO in comparison to terms that were not. These findings are the first of their kind to indicate that SO characteristics are truly experienced as an aspect of the new person.

Measuring the use of romantically relevant characteristics. As per H3, it was our expectation that presenting target persons during a task that related to romantic relationships would increase the use of SO information pertaining to that task in particular. On average, 22% of the terms generated to describe SOs were classified by participants to be highly stereotypical of romantic roles (e.g., "loving", "caring", "honest"), while 45% were rated as highly non-stereotypical (e.g., "worldly", "organised", "intelligent") (the remainder of representation-consistent items were not rated strongly in either direction and were not included in this particular analysis). An increased false positive or hit rate among romantically relevant terms served as a measure of the use of romantically relevant information from amongst SO memories. In order to explore whether processing goal affected all SO items equally, or more so those that were stereotypically romantic, an analysis was performed on the probabilities of responding 'Yes' to all items sourced from a SO. Filler items were not rated for stereotypicality, and were thus also left out of this analysis. A basic model was built including a term for item type (Target; Target = 1, Distractor = 0) and item source (SO; OwnSO consistent = 1, YokedSO consistent = 0):

$$\text{Logit (p[SaysYes}_{ij}) = \beta_0 + \beta_1\text{Target}_{ij} + \beta_2\text{SO}_{ij} + e_{ij}$$

This model produced a significant main effect for item type, $\beta_1 = 4.57, p < .001$, reflecting a greater overall hit rate than false positive rate ($M_{\text{target}} = 0.84, SD_{\text{target}} = 0.37 > M_{\text{distractor}} = 0.09, SD_{\text{distractor}} = 0.30$). No main effect of item source was found, which could be a statistical artifact of the absence of “OwnSO” items within the target person descriptions in the high intraclass distance condition. Hence, we removed SO from the model. Next, a term was added for the degree to which items were stereotypical of a romantic role (Stereotype; Stereotypical = 1, Non-stereotypical = 0):

$$\text{Logit (p[SaysYes}_{ij}) = \beta_0 + \beta_1\text{Target}_{ij} + \beta_2\text{Stereotype}_{ij} + e_{ij}$$

Including stereotype in the model increased its fit to the data, $X^2(1) = 10.621, p < .001$. We found a significant main effect for the stereotypicality of SO items, $\beta_2 = 0.86, p < .001$, showing that participants were more likely in general to respond ‘Yes’ when an item was highly stereotypical of a romantic role ($M_{\text{stereotypical}} = 0.30, SD_{\text{stereotypical}} = 0.46 > M_{\text{non-stereotypical}} = 0.26, SD_{\text{non-stereotypical}} = 0.44$). In this model, the β_1 coefficient for item type remained relatively unchanged. In the next model, we added the interaction term between target and stereotype:

$$\text{Logit (p[SaysYes}_{ij}) = \beta_0 + \beta_1\text{Target}_{ij} + \beta_2\text{Stereotype}_{ij} + \beta_3(\text{Target:Stereotype})_{ij} + e_{ij}$$

The fit of the model improved significantly, $X^2(1) = 9.10, p < .001$, and the interaction effect was significant, $\beta_3 = -1.6212, p < .01$. Table 7.4. shows that

stereotype only affected false positive rates, which were higher for stereotypical ($M = .12, SD = 0.32$) in comparison to non-stereotypical items ($M = .07, SD = 0.25$). This is in line with the preceding false positive analysis, which showed strong effects for processing goal, as well as in line with our analysis of discriminability in the low intraclass distance condition, which did not show a similar effect, perhaps due to the inclusion of hits which were not as affected by processing goal. The main effect β value for stereotype did not change significantly.

Table 7.4.

Average probability of a 'Yes' response as a function of item type and stereotype

Item type	Stereotype	
	Non-stereotypical (SD) [0]	Stereotypical (SD) [1]
Distractor [0]	0.07 (0.25)	0.12 (0.32)
Target [1]	0.84 (0.37)	0.84 (0.36)

Note. Numbers within square brackets are values of dummy codes in model.

Next, we added a main effect for processing goal, which did not improve the fit ($p > .6$), and then an interaction term between stereotype and processing goal.

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{Target}_{ij} + \beta_2 \text{Stereotype}_{ij} + \beta_3 (\text{Target:Stereotype})_{ij} + \beta_4 (\text{Stereotype:Goal})_{ij} + e_{ij}$$

Adding this interaction did improve the model fit, $X^2(1) = 5.15, p < .05$, with a term coefficient $\beta_4 = 0.87, p < .05$, reflecting increased probability of false positives in

the goal relevant condition among terms that were stereotypically relevant of romantic roles (Figure 7.3). This provides evidence that SO information relevant to romantic contexts was used more when participants were performing a romantic task. Adding this interaction term marginally reduced the main effect of stereotype, but the model still maintained that across processing goal conditions participants exhibited a general response bias towards items which were stereotypical of a romantic role, $\beta_2 = 1.01, p < .05$. The addition of a three-way interaction (Target:Stereotype:Goal) did not improve model fit, $p > 0.72$, and was thus not included in the model.

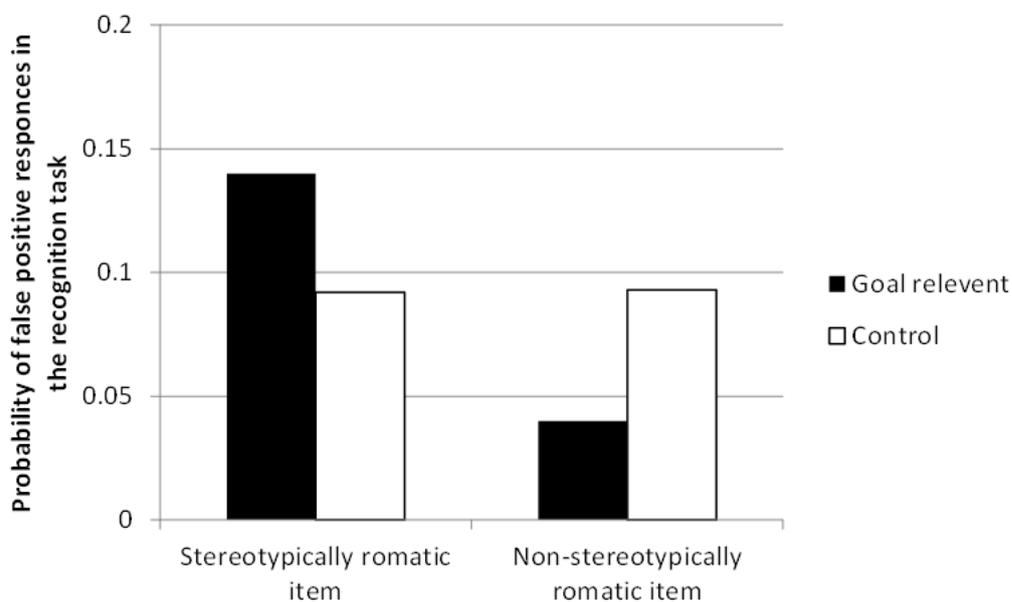


Figure 7.3. Average probability of a false positive as a function of processing goal and item stereotypicality.

Discussion

In the present study the obtained results supported our prediction that memories of SOs would play a role in the perception of newly encountered people

who share characteristics with that SOs (H1). We observed a significantly higher rate of false positives in the low intraclass distance condition for SO items; participants declared non-present SO characteristics to be present for a target person more often as the intraclass distance between the SO and the target person decreased. Said otherwise, in this our third attempt we were able to replicate the classic transference finding. Moreover, the signal detection analysis showed that when there was comparably low intraclass distance (i.e., when there were shared characteristics between the SO and the target person) participants' ability to distinguish between target and non-target items was reduced. Thus, the presence of cues toward the SO affected the accuracy of recognition memory for target persons, strongly suggesting that the impression formation of a new target person was guided by memories of participants' SOs.

Regarding the first of our novel hypotheses, our prediction that the extent of transference would be moderated by processing goal (H2) was partially supported. Although the predicted three-way interaction was not significant, the observed trend was consistent with our expectations. The difference between the rate of false positives for SO characteristics and false positives for non-SO characteristics was highest when there was both low intraclass distance (i.e., resemblance) between the target person and the SO and the processing goal made the SO more relevant. In light of the complexity of the hypothesised pattern of results, we tentatively suggest that this is evidence that participants determined their use of SO information not just on the basis of SO to target feature congruence, but also on the basis of whether the SO is relevant to what the participant is presently doing. In addition, and not as part of our predictions, our processing goal manipulation also significantly affected SO item false positives regardless of intraclass distance,

or resemblance level; the mock dating exercise increased the false positives rate for SO characteristics in general. This suggests that perceivers may invoke SO information in judgements of targets because aspects of the social context, like the perceiver's task, makes a SO a potentially useful source of information for that target. Although this could easily be confused for target specific transference, this effect would operate independently of baseline SO to target feature congruence and thus not be deemed transference in the traditional sense. Or alternatively, it might be said that the target's presence in a particular social context *creates* a point of feature congruence between the SO and the target such that transference subsequently occurs.

Our prediction that the specific content of transference would be moderated by perceiver goals and motivations (H3) was supported. SO characteristics rated as stereotypically romantic were more likely to be misattributed to the target person when participants were given a processing goal where romantic characteristics were more likely to be relevant. In other words, participants were more likely to invoke memories of a SO that were contextually relevant in informing their understanding of the newly encountered person. This finding is similar to the observation in a number of other empirical studies of varying likelihood of transference for different SO characteristics (Andersen & Cole, 1990; Pierro & Kruglanski, 2008; Pierro et al., 2009). However, while in those other studies such differences have been attributed to the varying centrality of the characteristics to stored SO representations (i.e., characteristics more central, or core, to the representation), here the moderating role of the perceiver's task renders that explanation insufficient. Instead, these results are suggestive of a cognitive process that is highly responsive to the present state of the perceiver and

the perceiver's experienced context, such as online category formation.

Overall the present study provides two key empirical contributions to transference research. Firstly, we were able to show that the ability of participants to recognise target information was significantly impeded when a SO was made relevant; suggesting that targets were actually encoded in terms of a SO. While it has long been posited that SOs serve as a source of inference for others (Andersen & Cole, 1990; Secord & Jourard, 1956), this study is the most robust demonstration to date that SOs are involved in memory processes relating to newly encountered individuals. These results strongly suggest that more sensitive approaches to the measurement of transference are available and should be used whenever possible.

The second key empirical contribution is that we were able to obtain initial evidence that transference behaves in accordance with the social categorisation model of transference. The primary aim of this study was to demonstrate that perceiver readiness factors, including the current goals and motivations of the perceiver, play a role in constraining transference. Our predictions that processing goals would play a role in determining both the extent of transference and the content of transference were largely born out. Our data has shown that, in addition to SO-to-target resemblance, processing goals also moderate the extent that memories of a SO are used to understand a newly encountered person, as well as showing that processing goals also help determine which aspects of a SO are likely to be brought to bear in transference. As articulated above, the moderating role of perceiver goals is not anticipated in the social-cognitive model of transference and instead the message is that SOs are chronically accessible and consequently that there will be little to no variability transference due to perceiver readiness factors.

This is not to say that Study 3 was without opportunities for improvement.

For one, our application of signal detection analysis was necessarily limited. Although an investigation of discriminability between representation-consistent items and representation-inconsistent items was possible within the low intraclass distance condition, comparison of discriminability for SO generated items *between* intraclass distance conditions was impeded by traditional transference methodology. This is an artefact of the competing goals of signal detection analysis and that methodology. To elaborate, the usual goal of a memory recognition task is to investigate the ability of participants to correctly distinguish old information (learned information) from new information. A transference study's goal, in contrast, is to investigate a perceiver's ability to distinguish between old and new information *when it is of a particular type*; that which is related to a SO. The challenge arises because transference studies therefore include a control condition wherein the recognition task is performed without the influence of a SO construct. This is, of course, important theoretically, but methodologically it is a difficulty for signal detection. The high intraclass distance condition in the present study contains no SO information in the list of terms that are learned; terms that become targets in the recognition task. Thus, there are no representation-consistent targets in the recognition task, only representation-consistent distractors. This makes an investigation of discriminability between conditions impossible. In order for transference studies to truly compare discriminability of targets and distractors of the same source between conditions in which a SO construct is and is not active, an as yet unknown revision of the traditional transference paradigm would be required.

There are also limitations in terms of what we can infer from our signal detection analysis. Signal detection analysis is not able to determine exactly how

SO memories affect the relative movement of signal and noise distributions, or the movement of a response criterion. While it can now be stated that discrimination is reduced by the involvement of SO memories, it is ambiguous whether discrimination changed because of a shift in the position of the familiarity distribution for old items, or because of a shift in the position of the distribution for new items, or because of a shift in both (Locksley et al., 1984). Said otherwise, recognition memory data can show only whether subjective familiarity distributions for new and old schematic information are closer (reflecting poorer discrimination) or farther apart (reflecting better discrimination) than the distributions for old and new aschematic information. It cannot show how the distributions neared or departed each other.

Notes

1. Seven participants were excluded from analysis (see Study 2, participant attrition, this chapter), which means that the sample's age characteristics were calculated on the basis of data from 93 participants.
2. Study 3 was conducted as part of Ashlee Riorden's undergraduate honours project. While the design of the study was a collaborative effort, much credit should go to Ashlee, particularly regarding the development of the romantic partner manipulation and the leg work involved in conducting the study. Analysis of was conducted with support of Dirk van Rooy, and the interpretation of results is unique to the present thesis.

3. Twelve participants were excluded from analysis (see Study 3, participant attrition, this chapter), which means that the sample's age characteristics were calculated on the basis of data from 52 participants.

4. The three scale points were "This comment is not related to my significant other's role as a romantic partner", "I would expect to apply this comment to some romantic partners", and "This comment is true of all individuals when assessed in a romantic partner role. This is a characteristic or behaviour that most people expect or require of their romantic partners."

5. In the interests of clarity, on this occasion further instructions were given to participants for the irrelevant trait selection. For instance, participants were told that "this is a tricky question that is often misinterpreted. It is important that you check items which are actually irrelevant to your partner and not items which help describe them". Also, through an administration error "clownish" was once again included in the list of 95 adjectives at the expense of "systematic".

CHAPTER 8

REFLECTIONS ON THE EMPIRICAL PROGRAM AND FUTURE RESEARCH DIRECTIONS

In this chapter we begin by reflecting on the empirical program of this thesis as a whole and assessing the program against its aims. Over the course of three studies, each involving a somewhat complex and arduous two session experimental design¹, we achieved mixed success in providing empirical support for a social categorisation based account of transference. Specifically, while in Study 1 and Study 2 our predictions were not borne out, in Study 3 our key predictions were supported. Evidence that the basic transference effect had been successfully replicated was found using both a traditional false positive rate analysis and signal detection analysis; the latter of which suggests that transference does indeed involve the use of SO information in understanding newly encountered people, rather than just reflecting a primed response bias for SO characteristics. Study 3 also demonstrated that both the extent of transference and the content of transference are constrained by the processing goals of perceivers. Systematic variation in transference as a function of processing goals is not something that one would expect on the basis of the social cognitive model of transference. Study 3 thus provides critical preliminary evidence that there is indeed added utility in a social categorical understanding of transference.

We then turn to possible future empirical directions for transference research, proposing a number of possible future studies that may serve to extend what has been achieved thus far. Finally, in the last section of this chapter, we

again look to future research directions, but beyond the immediate context of transference. One theoretical thrust of this thesis has been to bring the transference phenomenon back into the fold of general social categorisation processes. It is therefore only natural that we turn our attention to some of the questions that remain unanswered in that broader research space. If transference is best understood as a par-for-the-course instance of social categorisation, and indeed cognitive categorisation, then what are some key areas where our knowledge of cognitive categorisation processes need development?

Review of the empirical program

The aim of the empirical program reported in this thesis was to demonstrate the utility of the social categorisation model of transference, in comparison to the currently dominant social cognitive model of transference. To achieve this, the intention was to look to the additional constraints on transference proposed by the social categorisation model; that is, those not also part of the social cognitive model. These are perceiver readiness and normative fit, as well as the other half of the comparative fit, interclass distance. If novel hypotheses can be developed on the bases of these added constraints, and then supported empirically, then it may be concluded that the social categorisation model of transference has predictive advantages as an account of the phenomenon.

Study 1 and Study 2: Initial setbacks

Study 1 was an attempt to show that the extent of transference can be manipulated by making changes to the perceiver's frame of reference and leaving the SO and newly encountered target untouched; or in social identity terms, by keeping intraclass distances stable while altering interclass distances. In doing this we were careful to keep the manipulation as simple as possible to avoid the

accidental introduction of confounds; the manipulation involved the addition of a single person across conditions who shared varying degrees of characteristics with the target.

The results of Study 1 did not bear out our predictions. Despite manipulation checks suggesting that the interclass distance manipulation did operate as intended, we did not observe the moderation of the extent of transference in line with the comparative fit principle. Indeed, we did not observe transference at all; there were no significant results for any of the dependent variables (i.e., false positive confidence, response time, false positive errors, and felt closeness) in the anticipated direction. The most likely explanation for this was the limited statistical power of the study, which arose due to a very high attrition rate across the two experimental sessions. To look at the issue of statistical power more specifically, while keeping in mind the limited utility of post hoc power analyses, the approximate statistical power of Study 1 was calculated using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007). Presuming the desire to detect a small effect as demarcated by traditional social science standards (i.e., $F^2 = 0.02$)² (Cohen, 1988), the statistical power for the initial 3×2 MANOVA was very low ($\beta = .19$). The follow up post hoc 2×2 MANOVA did not meaningfully improve statistical power: noting the unbalanced cell sizes, the statistical power was essentially equivalent at best ($\beta = .19$).

Low statistical power is therefore a highly plausible explanation for the obtained null results. Nonetheless, there was another possible explanation. The introduction of an implicit processing goal may have been an unintentional consequence of our introduction of a second person to the traditional transference methodology; that goal being to determine the relationship between the first and

second person being presented. If such a goal was introduced for participants, then the likelihood of those participants using SO information in social perception may have been reduced because SO information is unlikely to be relevant. This follows the principle of perceiver readiness, which states that, *inter alia*, social perception will be driven by perceivers' current motives and goals. This appeared particularly plausible in light of the absence of any of the expected trends among the means in the obtained results.

The aim of Study 2 was to deliberately manipulate the presence of a processing goal that would have the same effect as that which may have been accidentally introduced in Study 1. Study 2 thus became a deliberate investigation of the role of perceiver readiness in constraining transference.

To pull off an intentional manipulation of processing goals, the recognition task in Study 2 was introduced in two different ways. In a control condition the recognition task was introduced in a manner identical to Study 1, minus the second target person. In the experimental condition the recognition task was introduced as requiring participants to make a determination as to whether the target was a student at participants' own university or a student at another local university; this being a task unlikely to be assisted by a comparison with participants' SOs. The second target person was not present in this second study, as comparative fit was no longer the focus of empirical investigation. The manipulation of intraclass distance remained, of course, as that manipulation corresponds to the standard manipulation of SO to target characteristic overlap. Indeed, on the back of the null results obtained in Study 1, we were particularly interested in this Study as a replication attempt of the basic transference finding.

The results of Study 2 also did not conform to predictions. Critically, reduced intraclass distance did not reliably increase signs of transference among any of the dependent measures, meaning that the basic transference finding was not replicated. This meant that the predicted moderating effect of the processing goal manipulation could not be observed; a processing goal irrelevant to SOs could not reduce a transference effect that was there in the first place. This was the case despite efforts to address the statistical power limitations present in Study 1, and a resulting sample size on par with other contemporary transference studies. What instead was observed in Study 2 were two non-significant trends among means partially in line with predictions. Specifically, among all of the dependent measures the lowest intraclass distance condition resulted in the greatest indications of transference, and for one dependent measure the pattern among means was such that reducing intraclass distance consistently increased signs of transference. These interpretable trends raises some hope that an improvement in statistical power across Study 1 and Study 2 increased the likelihood of detecting a transference effect that was indeed present. A post hoc power analysis, however, suggests otherwise. Again presuming the desire to detect a small effect, the statistical power for the 3×2 MANOVA was still very low ($\beta = .21$), meaning that Study 2 was also unlikely to detect the predicted main effect and interaction effect.

Although low statistical power remained a serious limitation of Study 2, it is still of value entertain the possibility that the null results did indeed reflect reality. It could be that in Study 1 and in Study 2 the shared characteristics between SOs and newly encountered targets to not make participants any more likely to see SO characteristics as present in the targets. We were particularly cognisant of this latter possibility in light of the current “replication crisis” in social psychology. The

replication crisis refers to the concern that vast swathes of the social psychological research output may in fact be built upon type 1 errors (Pashler & Wagenmakers, 2012). Otherwise known as *false positive psychology*, the specific concern is that many of the purportedly robust, and often influential, effects in social psychology are instead false positives that are the result of unsuitable research practices (Kerr, 1998; Simmons et al., 2011), which are themselves partly caused by a long standing blinkered focus on significant results in social psychology publications (Dunnette, 1966; Rosenthal, 1979). Replicating the basic transference finding thus became even more imperative in the third study in the empirical program.

Study 3: Support of the social categorisation model of transference

In order to further increase the chances of successfully detecting signs of transference a mixed logit model analysis was planned for Study 3. A mixed logit model analysis has more statistical power than traditional aggregate comparisons and ANOVAs. This more complex analysis also introduced the opportunity to apply signal detection analysis to transference. Signal detection analysis allows researchers to distinguish genuine enhanced item-memory from a general memory advantage for familiar information (Wickens, 2001). In the context of transference this would mean distinguishing between a general memory advantage for SO characteristics and an impression of newly encountered targets that is truly imbued with SO information. To our knowledge this was the first occasion that this more diligent test of the transference phenomenon had taken place. Therefore, not only was Study 3 an important attempt to replicate the transference effect, Study 3 was also an effort to rule out alternative explanations more thoroughly.

Study 3 was also an attempt to address a potential criticism of Study 2. In Study 2 the intention was to attenuate transference via the introduction of a

processing goal that was irrelevant to participants' SOs. Should predictions have been supported, a valid concern would have been that the introduced processing goal simply distracted participants from impression formation entirely, or consumed cognitive resources to the same effect. The aim in Study 3 was, therefore, to instead *intensify transference* by way of an introduced processing goal. If transference could be shown to be intensified from a baseline level, then it follows that processing goals can influence the extent of transference in a way that is not otherwise explicable in terms of distraction or cognitive resource exhaustion. To achieve this it was necessary to identify and introduce a processing goal that was particularly relevant to participants' SOs. To this end, a mock dating exercise was used. By introducing the recognition task in a romantic context, while simultaneously including in the analysis only those participants who had nominated a SO who is, or was, a romantic partner, an experimental condition was created where the processing goal was one where the use of SO information would be more likely to be useful.

This experimental manipulation of the processing goal also afforded us the opportunity to conduct a further test of the social categorisation model of transference. That model rejects the social cognition approach notion that transference is the application of stored SO representations, and instead adopts an online category construction approach to social perception. We should therefore expect the SO and target categories that become salient to be highly bespoke entities, shaped by the perceiver's particular social context. This led us to expect that certain facets of SO information would be more likely to be used to understand newly encountered targets. Specifically, we expected SO characteristics

that are stereotypically romantic to be more likely to be involved in transference when the processing goal was a mock dating exercise.

Key predictions from Study 3 were supported. Critically, the basic transference effect was replicated. Participants made significantly more false positive errors for SO characteristics when the target was made to resemble participants' SOs. In terms of the signal detection analysis, participants' ability to recognise target information was significantly impeded more for SO characteristics than non-SO characteristics. This suggests that SO characteristics are indeed bound up in the impression formation of newly encountered people. Study 3 therefore provides key independent verification of the basic transference effect, as well as evidence via signal detection analysis that transference does involve the use of SO information in the development of our understanding of others. Given the present social psychology research environment, where scepticism abounds concerning the authenticity of long taken for granted empirical findings, Study 3 makes a substantial contribution to the social psychological study of the transference phenomenon.

Study 3 also served its purpose of providing initial evidence that there is added value in the social categorisation model of transference. Both the extent of transference and the content of transference were shown to be predictable on the basis of the present goals, motivations, or needs, of the perceiver. In terms of the former, the extent of transference, there was some evidence that the presence of a processing goal relevant to the SO increased the extent to which false positives for SO characteristics were more likely than false positives for non-SO items. In terms of the latter, the content of transference, the presence of a romantic processing goal increased the likelihood of false positives for particular SO characteristics

relevant to that goal. Neither pattern of results is readily explicable on the basis of the social cognitive model of transference, for two reasons. First, the social cognitive model has instead emphasised the chronic accessibility of SO representations, which would naturally limit expectations of variability in response to different processing goals. And second, that model posits that SO representations are fixed cognitive structures that are applied to newly encountered targets, which does not prompt us to consider that, within the same SO, particular information may be used more readily on the basis of its likelihood of being useful for present perceiver purposes.

Reanalysis of Study 1 and Study 2 data

Given the success of the multilevel modelling analyses applied to the Study 3 data, the decision was made to reanalyse the Study 1 and Study 2 data using those same techniques; the intention being to take advantage of the heightened statistical power that such analyses provide. Adopting a similar structure as that adopted for the Study 3 analysis, below we first report the outcome of the comparably straight forward mixed logit model analysis of false positive rates as they pertain to H1, the classic transference finding. In the second we report the outcome of the signal detection analysis pertaining to H1, which provides a test of whether the classic transference finding does indeed involve enhanced item memory.

Study 1 multilevel modelling. Recall that our primary hypothesis was that the probability of a false positive, or an incorrect response of 'Yes' during the recognition task, would be greater in a low as opposed to the high intraclass distance condition. Here, to assist with the interpretation of regression equations, and also to marginally increase statistical power, the Study 1 three level

manipulation of interclass distance was reduced to a two level manipulation by combining the medium and high intraclass distance conditions³.

The first modelling tested the linear relationship between the logit probability of a participant saying 'Yes' to a distractor item and intraclass distance (Distance; High intraclass distance = 0, Low intraclass distance = 1) and item source (SO; SO = 1, Non-SO = 0). As before, we began with a restricted model:

$$\text{Logit } (p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{SO}_{ij} + \beta_2 \text{Distance}_{ij} + e_{ij}$$

A marginally significant main effect of item source was found $\beta_1 = .40, p < .07$, which indicates that participants were potentially more likely to say 'Yes' to SO items. More specifically, we can conclude that the odds of an incorrect answer for SO items is approximately .40 times higher than for non-SO items. There was no significant main effect of intraclass distance ($p > .2$); we therefore removed the term from the model. Instead, an intraclass distance by item source interaction term was added, which allows us to determine whether the probability of a false positive specifically among SO items was moderated by intraclass distance:

$$\text{Logit } (p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{SO}_{ij} + \beta_2 (\text{SO:Distance})_{ij} + e_{ij}$$

Contrary to the Study 3 results, including the intraclass distance by item source interaction term reduced the model fit with the data. The interaction was not significant, $\beta_2 = 1.03, p < 0.05$, and the main effect for item source also became non-significant ($p > .7$). This means that at this point the basic transference prediction was not observed.

The possibility remained, however, that the basic transference effect was being masked by the moderating effect of the interclass distance manipulation. To test this possibility, interclass distance (Interclass distance; High = 0, Low = 1) was introduced into the modelling. First, introducing a main effect for interclass distance reduced the fit of the model. Adding the interaction between interclass distance and SO also reduced the fit of the model, as was the case when adding the three way interaction between intraclass distance, item source, and interclass distance. In sum, no signs of transference were evident using the traditional measure of false positive rate for SO items.

In terms of the signal detection analysis, we investigated whether discriminability was reduced within the low intraclass distance condition among SO items compared to non-SO items. This analysis began with a comparably simple model, with variables for item category (Target; Target = 1, Distractor = 0) and item source (SO; OwnSO consistent = 1, OwnSO inconsistent = 2) included.

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{Target}_{ij} + \beta_2 \text{SO}_{ij} + e_{ij}$$

As in Study 3, a main effect of target was found, $\beta_1 = 3.71$, $p < .001$, reflecting a higher rate of hits overall than false positives, as well as a main effect for item source, $\beta_2 = 0.32$, $p < .05$, reflecting a general bias to respond with 'Yes' to SO items. The addition of an interclass distance variable to this model reduced model fit, and was excluded from further analysis. The next model included the interaction between item type (Target) and item source (SO):

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{Target}_{ij} + \beta_2 \text{SO}_{ij} + \beta_3 (\text{Target} \times \text{SO})_{ij} + e_{ij}$$

This also failed to improve the model fit, meaning that unlike in Study 3 no evidence of transference was found using a signal detection analysis.

Study 1 multilevel modelling. Here too we begin with a restricted model:

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{SO}_{ij} + \beta_2 \text{Distance}_{ij} + e_{ij}$$

A significant main effect of item source was found $\beta_1 = 1.72, p < .001$, which as usual indicates that participants were more likely to say 'Yes' to SO items. There was also no significant main effect of intraclass distance ($p > .7$); we once again removed the term from the model. The intraclass distance by item source interaction term was added, allowing us to test the basic prediction of transference:

$$\text{Logit}(p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1 \text{SO}_{ij} + \beta_2 (\text{SO:Distance})_{ij} u_{ij} + e_{ij}$$

Again contrary to the Study 3 results, including the intraclass distance by item source interaction term reduced the model fit with the data. The interaction was not significant ($p > 0.8$), although on this occasion the main effect for item source retained significance, $\beta_1 = 1.61, (p < .001)$. Thus, the basic transference prediction was not observed.

As with the Study 1 reanalysis, we explored the possibility that the basic transference effect was being masked by the moderating effect of the second manipulation: in this case, goal relevance. To test this possibility, goal relevance was introduced into the modelling. First, introducing a main effect for goal

relevance (Goal; Relevant = 0, Irrelevant = 1) reduced the fit of the model. Adding the interaction between goal relevance and SO also reduced the fit of the model, as was the case when adding the three way interaction between intraclass distance, item source, and goal relevance. In sum, no signs of transference were evident using the traditional measure of false positive rate for SO items.

The signal detection analysis began as above, with variables for item category and item source included:

$$\text{Logit } (p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1\text{Target}_{ij} + \beta_2\text{SO}_{ij} + e_{ij}$$

A main effect of target was found, $\beta_1 = 4.94$, $p < .001$ again reflecting a higher rate of hits overall than false positives. The same main effect for item source was significant, $\beta_2 = 0.94$, $p < .05$, in line with the preceding analysis of false positives. The addition of an interclass distance variable to this model again reduced model fit, and was excluded from further analysis. The next model included the interaction between item type (Target) and item source (SO):

$$\text{Logit } (p[\text{SaysYes}_{ij}]) = \beta_0 + \beta_1\text{Target}_{ij} + \beta_2\text{SO}_{ij} + \beta_3(\text{Target} \times \text{SO})_{ij} + e_{ij}$$

The result of this inclusion was somewhat paradoxical. The interaction effect was significant, $\beta_3 = -1.24$, $p < 0.05$, as well as both main effects (Target, $\beta_1 = 5.55$, $p < .001$; SO, $\beta_2 = 1.53$, $p < .001$), yet overall the model's fit to the data reduced significantly, $X^2(1) = -76.70$, $p < .01$. In any case, the significant interaction was counter to expectations, suggesting that participant's ability to distinguish target items from distractor items was *increased* when they were descriptive of a

participant's SO in comparison to terms that were not. There is no readily available interpretation for this finding⁴.

Overall then the application of multilevel modelling to the Study 1 and Study 2 data did not result in observations of transference, either in terms of traditional false positive rates, or using a signal detection analysis. This exercise was not without value, however, as it increased the credibility of our above speculation that something beyond low statistical power led to the null results obtained in both those studies.

Key limitations of the empirical program

Although Study 3 is by far the most successful study, by classic measures, it still has its limitations. Most challenging for the purposes of advancing the central message of this thesis, Study 3 is limited when it comes to demonstrating the social categorical nature of transference. Empirically connecting transference with perceiver readiness, via the processing goals of perceivers, demonstrates the utility of including perceiver readiness factors in a model of transference. The results of Study 3 can still, however, be reconciled with a general social cognitive account of transference. Looking first at the extent of transference, in Chapter 7 we saw that broadly speaking the social cognitive tradition does anticipate that processing goals will constrain impression formation. It is therefore uncontroversial from that perspective to find that SO information was more likely to be utilised in the presence of a processing goal relevant to SOs. In fact, this could also be interpreted as a heightened readiness to apply SO representations on the basis of the processing goal, where the processing goal acts akin to a contextual cue toward the relevance of those SO representations. This would be similar to our explanation for the additional observation in Study 3 that a relevant processing

goal increased the likelihood of false positives for SO characteristics irrespective of the intraclass distance, or resemblance, condition. We suggested that a mock dating exercise could have acted as a cue as to the relevance of a SO representation, either directly or indirectly, because that social context created congruence between the target and the SO.

The Study 3 results pertaining to the content of transference can also be reconciled with the social cognition approach, although this is more complex. We observed that in the presence of the mock dating exercise participants were more likely to make false positive errors for stereotypically romantic SO characteristics. This was interpreted as consistent with online category formation and the social identity notion that the construction of social categories is highly responsive to the social context, as well as the needs, goals, and motives of perceivers. It certainly is inconsistent with the social cognitive model of transference's description of SO representations as stored unitary cognitive structures that are largely applied in their entirety. In that model, if some SO characteristics are more likely than others to be transferred, this is attributed to the degree of centrality of those characteristics to the stable SO representation ((Andersen & Cole, 1990; Pierro & Kruglanski, 2008; Pierro et al., 2009; see Chapter 5). To reconcile this Study 3 result with the social cognition approach more generally, a storage space with a large number of dimensions of accessibility must be conceptualised. While the semantic content contained within SO representations would be accessible via cueing of that SO representation, that semantic content would also need to be accessible via cues that do not relate to the SO. For example, if a SO representation entails the characteristics 'short', 'blond', and 'Australian', then those characteristics must also be able to be cued without involving the SO

representation in its entirety. Australian, for instance, would need to be able to be cued directly by a social context involving cricket, beaches, and beer. What is needed is a multidimensionality of accessibility, which would no doubt be accepted by social cognitive researchers.

Raising the idea of a multidimensionality of accessibility further illustrates the challenge for the social cognitive model of transference with respect to stored unitary SO representations. Multidimensionality suggests that SO representations should be embedded within a rich interconnected architecture of semantic content. If this were not the case then the semantic content corresponding to each SO representation would need to be isolated and unique, or if not unique, necessarily duplicated elsewhere (e.g., what is Australian within a SO representation could not be used to also inform what is Australian for other representations). This would appear *prima facie* inefficient to the point of implausibility. Instead, semantic content corresponding to SO representations should be able to be also used when necessary as semantic content for other representations (e.g., what is Australian for a SO representation can also inform what is Australian for other representations). This would avoid the need for duplication and allow semantic content to be accessible via any number of cueing avenues. Under these conditions, however, the notion of a stored n-of-one SO representation loses its meaning. This is because those representations become as bound up in the anticipated interconnected architecture as any other proposed cognitive representation, such as the representations for social groups. Whether the SO is a single individual or not has little bearing on the cognitive qualities of any corresponding representation; all representations can be expected to share

large amounts of semantic content with one another and operate in the same fashion.

The above brings us close to our earlier discussion, in Chapter 5, about the competition within social psychology at present between symbolic models and distributed connectionist models as sources of insight on human cognition. While we favour the latter, which goes hand in hand with the social identity approach's online category formation view of impression formation, it is difficult to make a strong empirical case for this. Our argument, for instance, rests heavily on the greater theoretical coherence and neurological plausibility of the distributed connectionist approach. The reality is that both the symbolic solution proposed above in social cognitive terms (i.e., a rich interconnected architecture of semantic content), and the distributed connectionist approach, are able to account for our obtained data. We must therefore admit that Study 3 is limited if the intention is to demonstrate relevance of connectionism and online category formation to transference, which is part of our overall goal. Study 3's results speak more to the practical utility of the social categorisation model of transference over the social cognitive model of transference, by introducing perceiver readiness factors.

Demonstrating the social categorical nature of transference is where the principle of comparative fit becomes very useful. We have explained in Chapter 6 how the often surprising and counterintuitive observations related to comparative fit help make the case for the practical utility of SCT's model of social categorisation. Those surprising and counter intuitive observations can also help make a strong case for the social categorical nature of social perception. This is because those observations often suggest the presence of *novel salient social categories*; novel salient social categories being those where there is little to no

chance that a comparable social category had been formed by the perceiver previously. Novel salient social categories thus rebut the potential argument that what is being witnessed is actually the application of a stored schema. One of the earliest SCT studies is a good example of this. In the third study in their empirical program, Hogg and Turner (1987b) asked participants to engage in a group task in which themselves and six others would need to indicate on a nine point Likert scale how socially approved a series of personality traits were. In reality the six other participants did not exist and instead participants received a series of pre-prepared responses that created a natural ingroup and outgroup distribution. In this study the ingroup was that group where one of the responses corresponded to the normatively established “correct” response (i.e., the presumed response participants would give without knowledge of others’ responses), and the outgroup varied in the direction that they differed from the ingroup; outgroup responses were either consistently higher or lower than the ingroup on the Likert scale, as illustrated in Figure 8.1. The results were such that participants’ responses reliably conformed away from the correct response and toward what was ingroup normative based on metacontrast ratio. For instance, in Scenario A participants’ responses shifted away from the outgroup norm of approval toward the ingroup norm of disapproval, while in Scenario B participants responses shifted away from the outgroup norm of disapproval toward the ingroup norm of approval. This effect was strengthened when the categorisation scheme was made explicit for participants, but critical for our purposes is that neither the implicit categorisation scheme based on approval rating, nor the explicit categorisation scheme, were familiar to participants. Rather, this was the first time that participants were exposed to the stimuli. There is no reason to suspect that

participants would have previously considered how socially approved the particular personality traits in question were, let alone formed an inclusive social categorisation scheme on the basis of that information. Thus, the possibility that participants were acting in terms of a familiar categorisation scheme, or schema, that had been cued and applied to the situation can be ruled out. Instead, in this example it is clear that participants are using the stimuli presented to construct novel social categories that imbue those stimuli with meaning, and then responding in terms of the implications of those social categories for the self.

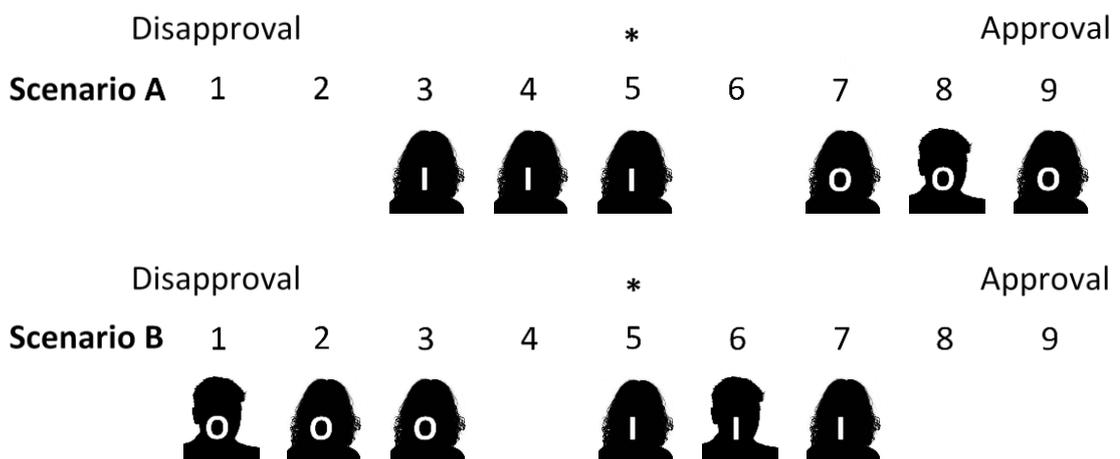


Figure 8.1. Hogg and Turner’s manipulation of the comparative context for Study 3, adapted from their Figure (1987b, p. 166). The numbers correspond to possible responses on the nine point Likert scale used by participants to indicate the level of social approval for personality traits. The asterisk indicates the response established prior to the study as the one most commonly selected outside the context of the study, the figures indicate responses provided by the six other fictitious “participants” in the study, and ‘I’ and ‘O’ denote whether those fictitious participants are ingroup or outgroup members for the participants, based on whether each group’s responses include the “correct” response.

The presence of a novel salient social category would have been part of our explanation for Study 1's results, should they have played out in line with predictions. Given that our participants were presented with a *newly encountered* target person it seems safe to assume that a SO and target social category would not be a social category that they would have stored in memory ready for activation and application. It is thus in this first study that we hoped to begin making a strong case for the social categorical nature of transference. By manipulating comparative fit it was hoped that we would see participants respond to the changing frame of reference in a way that clearly suggests categorisation processes were in operation; if a reduced number of shared characteristics between Person A and Person B (i.e., increased intraclass distance) increased accentuation effects between the SO and the target, then the natural implication would be that the encountered stimuli were driving the formation of a novel SO and target category. Of course, it would still be possible that the reduced number of shared characteristics between Person A and Person B simply facilitated the application of a stored SO representation for some reason, but without an *a priori* rationale for such an effect, the default explanation should be that transference is indeed social categorical in nature.

The value of the comparative fit principle for demonstrating the social categorical nature of social perception has implications for the future research directions. As will be seen in the next chapter section, a number of permutations on this theme that are attractive for the reason that, if results are consistent with predictions, they would make it difficult to maintain the standpoint that the cognitive process underpinning transference a) should be considered distinct from

other social perceptual processes, and b) involves the activation and application of stored SO representations.

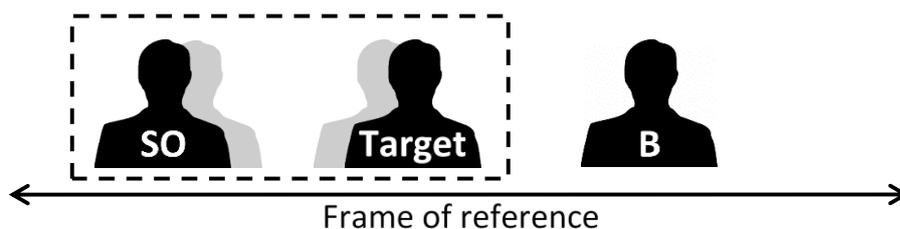
Further transference research from a social identity perspective

In the present chapter section we describe a number of possible research directions that would advance the social psychological understanding of the transference phenomenon. These directions can, broadly speaking, be classified into two types. First, we will describe an additional way in which the comparative fit principle may be brought to bear on the transference phenomenon. Second, we will look at possible direct investigations of SO representations; the intention being to interrogate the proposed unique qualities of that construct.

Transference and comparative fit

The first port of call for a continuation of this empirical program would make further efforts to demonstrate the relevance of comparative fit to transference. While in Study 1 our interest largely lay in possible moderation within the low intraclass distance, or high resemblance, condition, it is also theoretically possible to see moderation of transference in a high intraclass distance, or low resemblance, condition. Following the principle of comparative fit, the idea here would be to introduce an interclass distance condition where interclass distance is sufficiently high that the SO and target come to be classed together in the absence of any effort toward increasing intraclass distance. In other words, the intention would be to elicit transference in the absence of the traditional induced similarity between the SO and the target, instead using a shared dissimilarity between those two social stimuli and other social stimuli in the frame of reference to drive the effect. This type of moderation is depicted in Figure 8.2, which is an adaptation of Figure 6.1 to the present discussion.

A. High intraclass distance, low interclass distance



B. High intraclass distance, high interclass distance

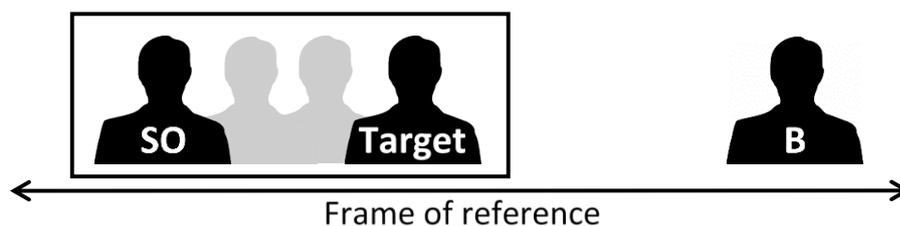


Figure 8.2. Moderated SO and target category salience within high interclass distance conditions as a function of changes to interclass distances.

A manipulation along these lines is particularly attractive due to the counterintuitive nature of the prediction, particularly in light of the social cognitive model of transference. That model emphasises similarity as the key predictor of transference, yet based on a social categorisation model of transference we have identified an opportunity to produce the same perceptual outcome in a way that circumvents similarity as it is understood in social cognitive terms. This would speak to the comparative utility of the social categorisation model of transference, as such a prediction could not be derived from the social cognitive model of transference intraclass distance. Nor could it be intuitively derived from the social cognition approach more generally. Because transference would be elicited without low intraclass distance, it would be difficult to understand transference as requiring the “cueing” of a stored SO representation; instead the necessary

requirement would be that the SO and target are classed together, which naturally implicates the social categorisation process.

This is not to downplay, however, the challenge of operationalising an interclass distance manipulation sufficiently potent to produce a salient SO and target category in the absence of reduced intraclass distance. Although the possibility of such a circumstance is a natural derivation from the theory, the practicalities may well be difficult to navigate. This is especially true given the key characteristics of the classic transference methodology. In that methodology great importance is placed on the two week delay between nominating and describing a SO, and then being introduced to the target person; the intention being to ensure that it is shared characteristics between the SO and the target that prompts transference, rather than observed false positives being a residual artefact of the session one task. This ostensibly rules out the obvious pathway to introduce a clear shared interclass difference, which is to place the SO and the target aside one another in contrast to others in the frame of reference. While this would not involve the SO and target sharing characteristics, the reasonable criticism would be that the presence of the SO in session two is essentially cueing itself, meaning that any false positives for SO characteristics within the impression of the target would be attributable to that ancillary SO cueing. In terms of that criticism, the results of such a study might naturally address that concern. This would be the case if no signs of transference were detectible in the high intraclass and low interclass distance condition. If this did occur, and if without any shared characteristics between the SO and target, and without shared dissimilarity with others in the frame of reference, there were no false positives for SO characteristics, then it may be said that the presence of the SO in session two is

insufficient to induce transference by itself; therefore, in the high interclass distance condition any signs of transference should not be attributed to that repeated SO presence.

There is, of course, every likelihood that the obtained pattern of results for a study along those lines would not be so neat and tidy; the mere presence of the SO in session two may well result in some characteristic misattribution between the SO and the target. Fortunately, there is another manner in which the presence of the SO in a second experimental session may be made methodologically sensible. This would entail changing the chief dependent measure for the study. In all other transference studies to date the dependent measure has revolved around false positives for SO characteristics within the impression of the target. Here we see utility in a reversal of that focus, instead investigating false positives for target characteristics within the SO. In Chapter 5 we saw that the social categorisation model of transference raised the possibility that, under the right conditions, the characteristics of a newly encountered target may come to be seen as present in a SO. Applying this idea to the present methodological challenge, the empirical hypothesis would be that within a high intraclass distance condition false positives for target characteristics within an impression of a SO will be increased under conditions of high, as opposed to low, interclass distance.

Should a hypothesis along those lines be supported, this would be evidence toward the existence of a salient SO and target social category. This would not be because SO to target similarity had been circumvented. In fact, a parallel criticism about the target essentially cueing itself would remain valid. Instead, the reversal of the direction of accentuation would support a social categorical account because the perception of the SO is now bound up in the nature of the social stimuli it is

encountered amongst. Rather than SO representations being strictly a long term memory phenomenon, SO representations would be malleable as a function of who they are compared with, which may involve a perceived equivalence with other social stimuli or a perceived distinctiveness; equivalence and distinctiveness being lawfully predictable as a function of, *inter alia*, comparative fit. Once again though, the practicalities of a study along these lines may pose challenges. The asymmetries we discussed in Chapter 5, where presumably SOs are richer sources of semantic content than newly encountered targets and, therefore, are more likely to be a source of accentuated content, may mean that transference from a target to a SO will only occur under limited set of circumstances. Nevertheless, with the right recognition task we anticipate that such effects may be elicited. In particular, by increasing the difficulty of the recognition task, or turning again to reaction time measures, subtle but systematic changes to the perception of SOs as a function of their comparative equivalence, or distinctiveness, with a newly encountered target should be observable.

Investigating SO representations in and of themselves

Immediately above we have discussed variations on the classic transference methodology. These included introducing the SO into the second experimental session, as well as changing the type of dependent measure of interest; specifically, attempting to detect false positives for target characteristics within the SO, rather than false positives for SO characteristics within the target. There is another critique that such changes may elicit; that these changes would substantially reduce the ecological validity of the proposed studies. After all, is transference not defined as the use of SO information in social perception, not the use of target information? And surely seldom would a SO actually *be present* in instances of “real

life” transference? These observations are correct, but the intention of such an investigation would not be to generalise directly from laboratory experimentation to the phenomenon at large. Instead, as is often the case with laboratory experimentation, the intention would be to examine certain aspects of theory aimed at explaining the phenomenon (Turner, 1981; see also Haslam, Jetten, & Waghorn, 2009; Haslam & McGarty, 2001). In this instance that aspect is the social categorical process as it relates to perception involving SOs.

Here we propose empirical efforts directed not at the potential relationship between SO representations and newly encountered targets, but rather investigations of SO representations themselves. This is because stored n-of-one SO representations are a critical element of the social cognitive model of transference. In fact, they are critical to the case for the uniqueness of transference as a psychological phenomenon (see Chapter 2). As such, here we propose an investigation of SO representations as described in that currently dominant model of transference. Specifically, we outline some potential tests of the distinctiveness of those representations from other types of cognitive categories. Should they prove to be not distinct, that aspect of the social cognitive model of transference would need to be amended, with implications for our understanding of the cognitive processes underpinning transference.

To briefly recap, the social cognitive model of transference posits that the process underlying transference is the activation and application of SO representations that are stored in memory as comparatively static cognitive fixtures. These structures are distinguishable from social categories as a function of their n-of-one status, which is to say that they correspond to the collection of knowledge about a single person only. Social identity theorists, however, are

sceptical about the existence of social representations that are stored as stable cognitive structures. Instead, where there is consistency in perception, social identity theorists attribute this to both the stability in the perceiver and stability in the environment in which the perceiver is categorising (Oakes et al., 1994; Turner et al., 1994). Moreover, the social identity approach subscribes to the view that a social categorisation process is at the heart of all perception, regardless of whether these categories pertain to a single person or a collection of people.

The above can be translated into an empirical question. On the basis of a social identity understanding of social perception, it should be possible to demonstrate the social categorical nature of SO representations, where SO representations are formed online and in context as a function of an interaction between perceiver readiness and fit, with the latter comprising of both comparative and normative elements. Once again (see this Chapter, and Chapter 6), of particular interest is the possible responsiveness of SO representations to changes in comparative fit. If our perceptions of SOs are shown to lawfully change as a function of changes in the frame of reference in which they are encountered, then this would suggest that SO representations are indeed social categorical in nature. As was the case with SO and target categories, there are many ways in which comparative fit maybe brought to bear on SO representations. Here we will provide examples of two such possibilities, both of which pertain to the issue of extending, or restricting, a perceiver's frame of reference.

SO representations and gender categories. In the social identity approach an extension to a perceiver's frame of reference refers to an increase in the number of stimuli present. The simplest example of this was actually provided in Chapter 3, during our introduction of comparative fit. In Figure 3.2 we saw that

the addition of point C to the frame of reference changed the observed relationship between points A and B; once point C was included it became clear that points A and B were apart from one another. The same principle applies to social stimuli, and Haslam and colleagues (2011) provide a useful example of how social categorisation can change as a function of changes to the breadth of the frame of reference with a resulting impact to comparative fit. In their Figure 3.4, or in our Figure 8.3, they present two contexts. In context 1, which is a comparatively restricted frame of reference, there exists two females only. In that context the most fitting categorisation scheme is therefore one that accentuates differences between those females. In context 2 the frame of reference is extended to include both males and females. There the fitting categorisation scheme is one that accentuates the differences between females and males and accentuates the similarities within each gender group. Such a categorisation scheme is not meaningful in context 1 because there are no males to compare females to and the category 'females' would have no meaning or utility. It is this principle that explains the results obtained by Abrams, Thomas and Hogg (1990) in their study conducted in the context of gender. They found that participants in mixed gender groups spontaneously mentioned gender reliably more than groups comprised of only one gender, suggesting that the introduced gender diversity with the group prompted social categorisation along those lines.

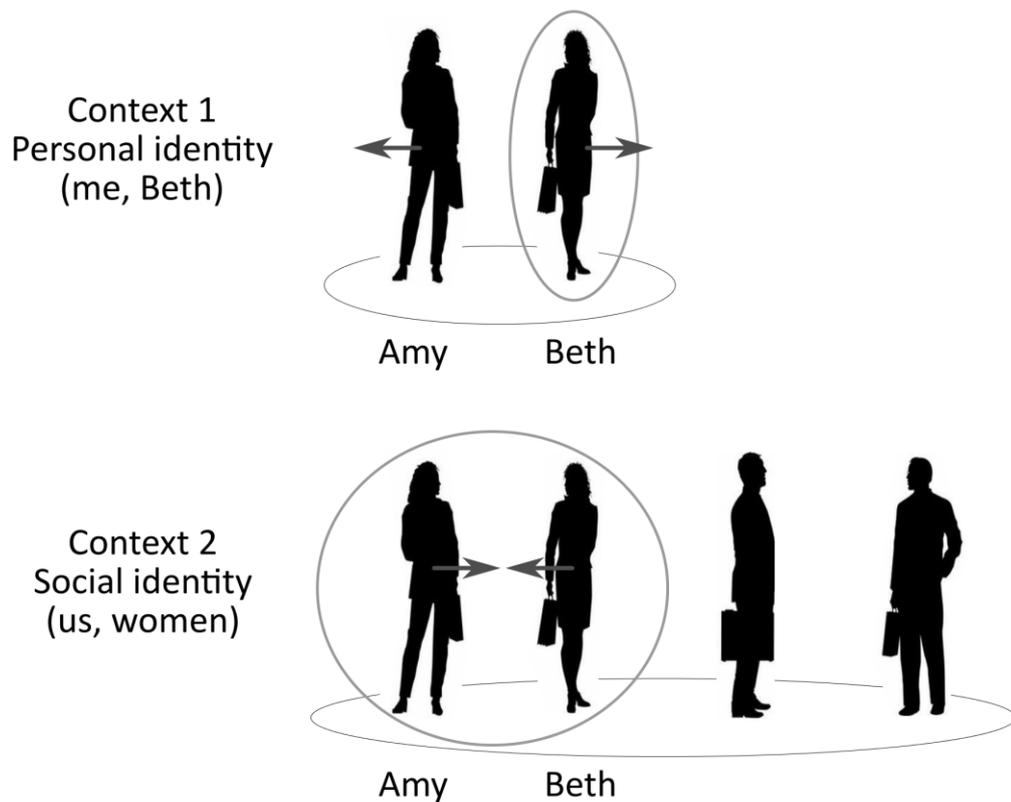


Figure 8.3. Changing salient social categorisation as a function of the breadth of the frame of reference. The circles represent salient self-categories, while the arrows represent the direction of accentuation (Haslam et al., 2011, p. 67).

Using examples along the lines depicted in Figure 8.3., social identity theorists often argue that frame of reference extensions should result in more inclusive, or more abstract, social categorisation schemes (e.g., Haslam et al., 1997). Strictly speaking this is an approximation. While the average level of inclusiveness must logically increase as more people are categorised, increasing asymmetry could also mean that, for example, one social category actually becomes less inclusive. Nonetheless, the idea of extending a frame of reference in order to increase category inclusiveness may well be fruitfully applied to the issue of SO representations. That is, it may be possible to extend a frame of reference in

such a way that SOs become categorised in a more inclusive manner, resulting in predictable and detectable shifts in the perception of those SOs. We will outline two such possibilities presently.

Perceptions of SOs may be shown to change as frame of reference is extended as it relates to gender. In fact, a manipulation of frame of reference following closely the example provided by Haslam and colleagues may well be the most appropriate. In a restricted frame of reference condition participants could be presented with their own SO and another person of the same gender as their SO (e.g., if a participant's SO is female then the other person would also be female), while participants in an extended frame of reference condition could be presented with their own SO and another person of a different gender to their SO (e.g., if the participant's SO female then these additional people would be male). The expectation here would be that in the restricted condition the SO will be categorised as apart from the second person and social categorisation in terms of gender is not made salient. Meanwhile, in the extended condition, the introduction of members of the opposite gender would increase comparative fit for gender and therefore make that categorisation scheme salient. This can be converted into testable hypotheses because gender stereotyping receives regular research attention. Within an English speaking western context, a reliable trend is for females to be perceived as comparatively dependent while males are perceived as comparatively independent (Antill, Cunningham, Russell, & Thompson, 1981; Bem, 1974). Indeed, Onorato and Turner (2004) used this fact to test for shifts in self-conception on the basis of whether gender categorisation is salient or not. They found support for their prediction that under conditions of gender salience male participants would endorse more independent traits as self-descriptive while

female participants would endorse more dependent traits as self-descriptive. We may therefore make predictions along the same lines, but for SOs; in the extended frame of reference, where salient gender categorisation is expected, we may expect more endorsement of independent traits for male SOs and more endorsement of dependent traits for female SOs.

SO representations and self-categorisation. The second context in which we may make predictions about how perceptions of SOs will change as frame of reference is extended relates to self. Here, rather than relying on a normative understanding of gender category content to generate predictions, we may turn to participants' understanding of themselves. The aim in this instance would be to affect the salience of a self and SO social category by way of a frame of reference manipulation. Here the expectation would be that a salient self and SO social category would accentuate the similarities between the SO and the self. That accentuation may be detected by measuring perceived trait congruence between the SO and the self, which once again connects the present research with the *inclusion-of-other-in-self model*. Recall that Aron, Aron and colleagues' research contributed to our Study 1 methodology by providing us with the concise IOS Scale. Here we can further draw upon that body of work. That research demonstrated that close others, as opposed to strangers and disliked others, are treated more like a self in terms of resource distribution and that close others, as opposed to non-close others and celebrities, are viewed as more similar to the self (Aron et al., 1991). It has also been shown that responses to the IOS Scale correlate positively with trait overlap between a target and the self (Aron et al., 1992; Aron et al., 1991; Aron & Fraley, 1999). These findings can be taken together as empirical precedent that within the domain of the self and close others, including

SOs, classing those entities together does result in changes to the perceived similarity of those entities. This is, of course, consistent with the expectations of the social identity approach, which is to be expected given that the inclusion-of-other-in-self model is informed by SCT (Aron et al., 1992; Aron et al., 1991). The extension in this proposed study would simply be to demonstrate the contextual responsiveness of these interpersonal, or dyadic, social categories.

The challenge of implicit outgroups. In these two potential studies, both aimed at leveraging the comparative fit principle to demonstrate the social categorical nature of SO representations, a potential complication is the inadvertent introduction of *implicit outgroups* into the experimental context. Implicit outgroups are those that are not obviously apparent to the experimenter as present in the frame of reference, but nonetheless have a psychological impact for the perceiver. To explain, in Haslam and colleagues' illustration of frame of reference effects within the context of gender, the two females in isolation was viewed as a restricted frame of reference and gender self-categorisation was not expected to be salient. However, although no males were in the vicinity, the two females may still have a sense that it is a male dominated environment (e.g., within setting of a male dominated business). Under these conditions the prior memories of other males within that environment may come to the fore. Said otherwise, prior memories of other people may be psychologically introduced to the frame of reference by the perceivers. The result would be a frame of reference that once again includes both females and males and therefore is still comparatively fitting for a gender categorisation scheme. A similar mechanism has been described in *adaption-level theory* (Helson, 1964). In that theory the "residual" are stimuli which are remembered from previous experience and that affect present

judgements. Applied to social stimuli, the residual may be prior experiences with people that may be either similar or dissimilar to those who are presently being judged (see also Mascaro & Graves, 1973).

If the methodological issue of implicit outgroups can be managed, and the predictions of studies along these lines are supported, then SO representations would have been shown to be responsive to the comparative fit principle. This would suggest that SOs, rather than being stored representations that are unique in their n-of-one quality and thus distinct from social categories, are intimately bound up in social categorisation processes. The implication of this is that SO representations are also highly fluid cognitive phenomena that are responsive to the experienced social environment. Applying this back to the social cognitive model of transference, as articulated above, empirical findings along these lines would bring into question a critical source of distinctiveness for that model. Without the distinctiveness of special n-of-one SO representations, the case for a separate social cognitive model of transference would be further weakened.

Further social categorisation research from a social identity perspective

In Chapter 5 we pointed to similarity based cueing, SO representation storage, and SO representation application, as areas where a social categorical approach either resolves theoretical impasses or otherwise adds some further clarity. In that same chapter we also identified a number of additional constraints on transference that may be used to better predict transference. Our focus on the advantages offered by the social categorisation model, and our overall advocacy for that model, could give the impression that we consider the social categorisation model of transference to be a magic bullet for our understanding of the phenomenon. That is not our assessment. While bringing transference back into

the fold of general social categorisation processes does answer some questions, many unknowns remain. We would still consider transference to be a phenomenon where continued social psychological research will further extend our understanding. What the present integrationist perspective does change, however, is the manner in which that research would be logically pursued.

Rather than undertaking transference research in comparative isolation and treating it as a special case of social perception, an integrated perspective would suggest that the most efficient way to advance our understanding of transference would be to advance our understanding of social categorisation processes in general. In this chapter section we therefore give some examples of ongoing research issues in social categorisation. We briefly introduce a number of known gaps in our understanding of social categorisation processes; the intention being to provide a sense of where further research into social categorisation might be directed. The two example research areas to be discussed are *types of categories* and *the influence of theories on categorisation*. Should research relating to either of these social categorisation issues prove fruitful, then our understanding of transference would necessarily also be advanced.

Types of social categories

The integrationist theme of this thesis has been largely inherited from the social identity approach. That approach stands out in its ability to lend explanatory power to a plethora of social phenomena (e.g., attraction, empathy, group polarisation, leadership, altruism, collective action) by way of what can arguably be boiled down to two cognitive mechanisms: self-categorisation and positive distinctiveness. Our interest in integration is also a response to long standing concerns in psychology about over-specialisation within the field (Branscombe &

Spears, 2001, Campbell, 1956; Fowler, 1990; Jacoby, 1983; Koch, 1993; Staats, 1983, 1991), as well as social psychology's long term memory loss when it comes to the research outputs of prior decades (Billig, 1996a; Tajfel, 1981). These concerns have helped spark our interest in looking for an explanation for transference is not unnecessarily predicated upon unique cognitive processes.

This focus on integration does not, however, mean that we are confident that there are no distinctive cognitive processes for particular social phenomena. Nor does it mean that we are closed to the idea that there may be different types of social categories corresponding to different social entities. It is simply the case that the degree of inclusiveness of social categories (i.e., whether social categories pertain to single individuals or collections of individuals) does not in-and-of-itself necessitate a separation of processes. Other category characteristics may well form the basis of meaningfully differentiations in terms of cognitive processes. Exploring these possibilities may be one valuable area of ongoing social psychological research. In other words, whereas in the present thesis we have primarily concerned ourselves with paring back superficial distinctions among social categories, this may be complemented by other research that is aimed at identifying a more foundational taxonomy of social category types.

An investigation of types of social categories would likely build on the already underway investigation of types of cognitive categories. Research has explored possible distinctions among categories that may determine the effects that those categories have on perception, and determine how those categories interact with one another. Wisniewski, Clancy, and Tillman (2005), for example, posit that when it comes to multiple entity categories there are likely four types. These are *unindividuated groups*, *individuated groups*, *semi-individuated groups*,

and *abstract individuals*. Broadly speaking, these types of groups are said to differ in the types of inferences that can be made to category members on the basis of category membership. Gentner and Kurtz (2005) offer another possible distinction among cognitive categories. In their research they argue for a distinction between *entity categories* and *relational categories*, where entity categories convey common properties while relational categories convey a common relational structure. They give the example of 'bridge' as a relational category, where bridge conveys a connection between two other entities or points. The examples given for entity categories are 'tulip' and 'camel', which both instil members with multiple intrinsic properties. Markman (2005) suggests similar typology of categories, but one that entails four category types: *Property-based categories*, *relational categories*, *goal derived categories*, and *role-governed categories*.

It may be that distinctions along similar lines can be established for social categories. In fact, with some regularity social categories are given as examples for category typologies. Gentner and Kurtz give the examples of 'brother', 'uncle' and 'person in a coma' as entity categories, while 'friend', 'social parasite' and 'escapee' are given as examples of relational categories. Similarly, Wisniewski and colleagues include 'family' and 'team' among their examples of abstract individual categories. The frequent use of social categories to explore possible distinctions among cognitive categories makes sense from the perspective of the social identity approach, which considers social categories as simply cognitive categories relating to social stimuli. In other words, social categories are cognitive categories that deal with a particular type of content; the consequence being that any distinction identified among cognitive categories should be expected to be present among

social categories, which is after all a deeply rich context in which categorisation takes place.

The full array of implications for a strongly justified typology of cognitive categories, and thus social categories, are as yet unknown. One suggested area of impact is in developmental psychology, where certain types of categories are more easily learned than others during developmental stages (Gentner & Kurtz, 2005). One may wonder then whether differential patterns of learning may also be present in adulthood, which may in turn have implications for learning as it pertains to social categories and social attitude change. Here we see potential relevance to transference, where understanding the types of cognitive categories involved in transference may allow further insight into how clinicians may be able to encourage, mitigate, or otherwise shape transference. The goal of this discussion is not, however, to look to the current categorisation literature for specific advances to our understanding of transference. Instead our goal is to emphasise the ongoing nature of social categorisation research, and if anything to point out areas of unknown when it comes to cognitive categorisation processes. As stated above, we anticipate that our understanding of the cognitive processes unpinning transference will be naturally advanced whenever we advance our understanding of cognitive categorisation generally.

It is yet to be established whether the proposed distinctions among different types of cognitive categories reflect true cognitive process distinctions. While we have no doubt that the cognitive category typologies being developed are of value, it may be that these remain content distinctions and that it is still a single cognitive process that underpins these different category types. Gentner and Kurtz (2005), for instance, consider it likely that their own relational category versus

entity category distinction actually reflects a continuum; one where cognitive categories should be expected to contain varying degrees of both relational and entity information. This would suggest that both relational and entity categories are produced by the same cognitive categorisation process.

Another reason not to presume that distinctions among category types reflect distinctions among cognitive processes relates to the invariably symbolic nature of the supporting analyses. Evidence for the existence of different types of categories is generally grounded in observations of language use. For example, it is argued that category types can be seen in the different roles that categories play in sentence structure (e.g., nouns versus verbs) or in the different ways in which we describe entities (e.g., mass nouns versus count nouns). Such observations may be considered to be symbolic in the sense that we introduced in Chapter 4 because the lens being applied is one that is tied up in the communicable meaning of categories. This means that evidence along these lines, as far as we can know, largely reflects the *products* of cognitive categorisation processes. Based on what we know about cognitive categorisation thus far, and in particular what we know about the potential role of connectionist networks in cognitive categorisation (see Chapter 5), we expect that if distinctions among categorisation processes exist then they will exist at the sub-symbolic level; they will operate prior to, and at times independent of, symbolic cognitive activity. This, of course, sets a reasonably high bar for what constitutes a distinction among categorisation processes. It is a benchmark that is necessary, however, if social psychology is to avoid attributing permanence to processing phenomena that actually only exist in response to the processing environment of a perceiver, including for instance the perceiver's culture and experiences in learning. Misattributions of permanence, which could

also be described as the *reification of content as process*, carry potential costs because, among other things, they blind us to opportunities to change attitudes and behaviour. If observed processing on the part of perceivers is presumed to reflect a distinction among cognitive processes that is ever present and essentially innate, then one would hold out little hope of making changes to the structure of that processing. Perceiver processing that reflects the perceiver's environment and other experiences, in contrast, are naturally viewed as more malleable.

Recognising malleable processing as malleable is important if one is to remain open minded to the full range of possibilities for shaping the beliefs and behaviours of others, where shaping the beliefs and behaviours of others is the chief concern of social psychology (whether social psychology is upfront about this or not).

The influence of theories on categorisation

The role of perceiver theories in social categorisation is critical to the social identity approach. For social identity theorists, perceiver theories are an ever present aspect of social categorisation, and indeed categorisation is impossible without them. In line with the esteemed work of Medin and colleagues (Medin, 1989; Medin, et al., 1993; Medin & Wattenmaker, 1987; G. L. Murphy & Medin, 1985), perceiver theories are argued to constrain the categorisation process and allow perceivers to increase the interest or relevance of certain dimensions and bootstrap themselves out of the otherwise infinite relativism of social stimuli. In other words, faced with the choice of a practically infinite series of social categorisation schemes that might be constructed, it is perceiver theories that narrow those down to a manageable handful, and in the end help determine the particular categorisation scheme that becomes salient (see Chapter 5).

Having established that perceiver theories play a critical role in the categorisation process, the natural next step is to further extend our understanding of perceiver theories themselves. This represents a critical research challenge for the fields of cognitive and social psychology. Why critical? The role of perceiver theories in categorisation is a chief point of weakness in the predictive power of models of cognitive categorisation. This is because, as it stands, understanding the theories of particular perceivers rests almost entirely on asking perceivers to describe their theories, or observing the impact of perceiver theories on categorisation. Said otherwise, perceiver theories are only accessible retrospectively; once they have been formed and after they have been indirectly observed. This means that there is a very inductive quality to the way in which we can engage with perceiver theories. Where one might wish to deduce the theories that perceivers hold in advance, instead the best one might hope to achieve is to observe perceiver theories in action at time one and then make the prediction that the same theories will influence perception at time two.

A good example of research efforts geared toward understanding the theories that perceivers bring to perception comes from social psychology. Fiske and colleagues' work on competence and warmth as dimensions of impression formation can be described as an attempt to identify fundamental structures of perceiver theories (e.g., Fiske, Cuddy, & Glick, 2007; Fiske, Cuddy, Glick, & Xu, 2002). Under the banner of the *stereotype content model*, that body of work argues that the dimensions of competence and warmth are privileged in impression formation and that the way in which we engage with others is disproportionately affected by where perceivers position people on those two dimensions (Fiske et al., 2007, for review). Fiske and colleagues mount an evolutionary argument for the

primacy of competence and warmth as dimensions of social perception and accordingly argue that all humans bring to social perception an innate readiness to classify others in those terms. Although the stereotype content model work is not generally articulated as an attempt to identify innate perceiver theories, this research is exactly that. By arguing that our perception of people is naturally geared toward two dimensions, Fiske and colleagues are taking a position within the social domain on the types of theories that people will hold; their suggestion is that we should always expect perceivers to hold theories of whether people are competent or not and whether people are warm or not.

Innate perceiver motivations is another research area where progress might be made in developing our understanding of perceiver theories, despite the study of perceiver motivations not generally being considered in relation to perceiver theories. Here we refer to efforts to identify the array of psychological needs that are “pre-programmed” into us as part of our make up as humans. The connection to perceiver theories is that these psychological needs are presumed to guide what we determine is important and how we see the world (e.g., what things are helpful, what things are a hindrance). Psychological needs thus can be thought of as a framework upon which perceiver theories will be built. Or put conversely, psychological theories should make sense in light of the psychological needs they are serving; once again, social perception is for the sake of our doing (James, 1890/1950, see Chapter 5).

The potential connection between psychological needs and perceiver theories can be illustrated by looking at one of the archetypal needs theories, Maslow’s *theory of human motivation* (1943). Although in scholarly circles Maslow’s theory has been abandoned (K. R. Murphy, 2008), and indeed Maslow

himself later distanced himself from his theory (Maslow, 1972), the well-known theory does show how assumptions about individuals' innate motivations may be used to make deductions about the types of theories they will hold. The hierarchical nature of Maslow's needs theory for instance, where physiological needs and safety needs take comparative primacy, might lead one to expect that perceivers will devote cognitive resources toward developing and holding theories about whether things are nourishing or not, and whether things may increase safety or decrease safety. Alternatively, on the basis of Maslow's theory one might expect that those who reliably have their "basic needs" met will cease to structure their understanding of the world in terms of physiological demands and safety concerns; those persons may instead be expected to develop theories concerning higher needs (i.e love, esteem, and self-actualisation) and use those as the basis of cognitive category formation.

These loose predictions are, of course, not intended to be serious theoretical propositions. The use of Maslow's largely abandoned needs hierarchy is intended to underscore the hypothetical nature of this exercise. The aim, once again, is simply to make clear that an improved understanding of psychological needs may, in turn, help develop a more predictive understanding of perceiver theories. We came in contact with a number of proposed innate human needs in Chapter 2 during the introduction of Andersen and Cole's theory of the relational self (see also Chapter 5). These included fundamental needs for autonomy, competence, meaning, security, and belonging. The idea we are proposing is that one or a number of these needs may be used to anticipate the kinds of theories that perceivers will hold about the world without resorting to the measuring the theories themselves.

In a sense this is a longer term version of the anticipated role of short term goals in driving cognitive categorisation (Barsalou, 1983). The classic example in relation to short term goals and cognitive categorisation is 'things to remove from an ablaze household'. The observation here is that perceivers are quickly and easily able to identify appropriate class members for that ad hoc category (e.g., children, pets, photo albums, medical records). To achieve this perceivers are presumably able to leverage a range of theories that allow for the construction of such obviously goal dependent cognitive categories. To continue the present example, these theories would encompass an understanding of what fire does to property, what things are difficult to replace, and what things may be easily carried; thus, the immediate goal of the perceiver provides clues as to the kinds of theories that are needed to respond appropriately to that goal. We are applying the same principle to innate, or ongoing, psychological needs. If it can be established that we humans all come with innate goals such as autonomy, competence, meaning, security, and belonging, then we may be able to find clues as to the kinds of theories that we must hold in order to respond to those goals appropriately.

It may also be the case, however, that we are not born with a plethora of established psychological needs that manifest in information processing. In fact, it may be that we have far fewer innate psychological needs than the current social psychological literature might suggest. At present, arguments for the presence of innate psychological needs tend to rely heavily on evolutionary arguments and the observation of adult and child behaviours. Missing from this body of research is the kind of neurological evidence or experimental developmental evidence that would help make the definitive case that such needs are indeed akin to instinct. The alternative explanation thus remains that the observed needs are not innate, and

instead are acquired through socialisation. In fact, needs acquisition is the more parsimonious account. For one, social psychology has made substantial advances in understanding influence, or the way in which the beliefs, behaviours, and goals of others can efficiently become our own beliefs, behaviours and goals (Turner, 1982, 1985, 1991). For psychological needs to be established as innate one would need evidence that clearly shows that influence processes cannot explain their proliferation. Additionally, psychological needs may emerge only in response to certain environmental conditions. So called belonging needs, for example, have been posited to help explain group behaviour and group commitment (Baumeister & Leary, 1995). From the perspective of the social identity approach, however, an apparent need to belong can be understood simply as response to a salient self-category. Here belonging behaviours are in effect driven by particular social circumstances; that is, the presence of subjectively real social groups (e.g., Oakes et al., 1994).

Technically speaking whether a psychological need is innate or acquired is not of direct relevance. If needs are acquired by enough people, or provoked by environmental circumstances regularly enough, they may be reliably used to draw inferences about the types of perceiver theories that will inform categorisation. The real concern is that if these needs are not innate, then they might not be acquired or provoked regularly enough to allow for sufficient predictive power. Indeed, even if the exceptions are rare, the possibility that those exceptions may be encountered at critical occasions is what makes distinguishing between acquired needs and innate needs germane to this discussion. Even then, that distinction between acquired and innate needs may prove to be insufficient to make this a genuinely useful line of enquiry. Although identifying psychological needs as

innate may mean that we can sensibly expect their omnipresence (leaving aside for the moment the complex manner in which innate needs may interact with the environment), this wouldn't necessarily translate into meaningful predictive power. Meeting innate needs might still be a very small part of what drives human behaviour and cognition. Said otherwise, the role that innate needs have in underpinning the perceiver theories that go on to inform cognitive categorisation might pale in comparison to the role of acquired needs in doing the same (cf. Pickett & Leonardelli, 2006). This would be in line with the general expectation of many researchers that it is fundamentally impossible to meaningfully understand people outside of the societies in which they exist; the expectation that humans are inexorably social beings (Onorato & Turner, 2004; Reynolds & Turner, 2006; Stolorow, 1991; Turner & Onorato, 1999).

To sum up, it is a fair assessment that social psychology has not progressed far in developing a functional understanding of perceiver theories as a component of the cognitive categorisation process (G. L. Murphy, 2005), nor is it clear that social psychology will ever be able to do so. In terms of innate psychological needs as a pathway to predicting perceiver theories, little progress has been made in this domain. Further, the likely substantial role of acquired needs may well trivialise any progress that may be made in the future. The same may be said of attempts to identify fundamental structures of understanding more directly, as in the example of the stereotype content model. Here too research is in its infancy and here too practical utility may be an unrealistic goal; it may be that focusing attention on the competence and warmth dimensions, for instance, is too reductionist and distracts from critically important content and context for impression formation judgements. This is not to say that ongoing research in these directions is not

warranted; indeed, the entire point of this chapter section is that it is cognitive categorisation research of exactly this kind that may advance our understanding of phenomena like transference. Our departing message here is only that we should also be prepared for a reality where perceiver theories are only something that we can engage with at face value. That is, it may be that we will only ever be able to engage with the perceiver theory component of the categorisation process after perceiver theories have been formed and after they have been observed in action. It may be that a functional psychological approach to cognitive categorisation will always need to be complimented by something akin to a sociological study of perceivers and the societies they inhabit (e.g., Turner & Reynolds, 2001).

Summary

In the present chapter we have discussed three topics that follow naturally from the empirical program reported in this thesis. First, we assessed the empirical program against its aims and made a number of reflections on that program. Overall we found that Study 3 made some headway into establishing empirical support of the social categorisation model of transference. That being said, Study 3 was not without its limitations. In particular, although the results of Study 3 are in opposition to the expectations of the social cognitive model of transference, those results are still able to be reconciled with the social cognition approach more generally. This limitation brought us back to the importance of implicating comparative fit in transference. We suggested that a strong case could be made for a social categorical understanding of transference, as opposed to a social cognitive understanding of transference, if transference could be shown to be predicted on the basis of comparative fit manipulations that aimed to make

novel social categories salient. Returning to comparative fit manipulations would therefore be one obvious avenue for future transference research.

In terms of additional avenues for future transference research, also discussed was the possibility of transference research concentrating on SO representations themselves. Specifically, we proposed research aimed at testing the tenet of the social cognitive model of transference that SO representations are stored in memory as comparatively static cognitive fixtures.

In the final section of this chapter we took a brief look at additional avenues for future cognitive categorisation research outside of the context of transference. This makes sense in light of our proposed theoretical approach. We view transference as a par-for-the-course instance of social categorisation, which therefore makes it a par-for-the-course instance of cognitive categorisation. As such, the best way to advance our understanding of transference, from a social psychological perspective, is to advance our understanding of cognitive categorisation in general. The two additional avenues for future categorisation research that we explored were types of categories and the influence of theories on categorisation. Each of these represents a key area of unknown for our understanding of cognitive categorisation.

Notes

1. The classic transference methodology is laborious mostly due to the need to individually vet every SO descriptor volunteered by participants. Over this empirical program well over 4,300 SO descriptors were checked for appropriateness and paraphrased as necessary.

2. Where effect sizes are reported in transference studies, the main effect for the resemblance conditions is generally in the small to medium range according to traditional social science standards ($d = 0.30$, Berenson & Andersen, 2006; $d = 0.13$, Brambaugh & Fraley, 2006; $\eta^2 = .07$, Kraus & Chen, 2010; $\eta^2 = .13$, Kraus et al., 2010). Because our investigations targeted presumably small perceptual effects acting in interaction with main effects of comparable size, detection of small effect sizes would be the natural ambition.

3. The decision to combine the medium and high intraclass distance conditions was made on the basis of the observed means for Study 1, as reported in the post hoc trend analysis. Given the generally null results obtained in the below analysis, a parallel analysis was performed using the converse grouping (i.e., low and medium intraclass distance vs. high intraclass distance). Results were nigh identical, and are not reported here in the interests of brevity.

4. Consistent with the Study 1 reanalysis, a parallel analysis was performed using the converse grouping for the intraclass distance manipulation (i.e., low and medium intraclass distance vs. high intraclass distance). On this occasion the only difference was an unanticipated significant interaction between SO and goal relevance, $\beta = 1.45$, $p < .05$, when attempting to replicate the basic false positive transference finding. This again coincided with a reduced overall model fit and was also not readily interpretable.

CHAPTER 9

IMPLICATIONS

Here, in the final chapter of this thesis, we reflect back on the social psychology of transference and explore ways in which a social categorical understanding of transference changes how we think about the phenomenon. In particular, we return to three areas of inquiry that have featured earlier in this thesis. These are a) transference and other social psychological phenomena, b) the relational self, and c) transference in the clinical domain. In terms of transference and other social psychological phenomena, and also the relational self, our general observation is that a great number of disparate empirical findings can be explained by way of a single cognitive process that operates quite happily, and indeed highly efficiently, across social contexts.

In terms of transference in the clinical domain, here we return to the topic raised at the very outset of this thesis: the management of transference through social psychology. Here the social categorical account of transference leads us to think differently about how therapists might determine the appropriateness or inappropriateness of a particular instance of transference. That model also changes our expectations about when transference will be attenuated, as well as how one might go about manifesting attenuation.

Transference and other psychological processes

The social psychology of transference has made connections between transference and cognitive resources, as well as connections between transference

and the perception of group members; that is, processes relating to intergroup relations. The social categorisation model of transference has implications for both of these. In terms of the former, the proposed model would have us question the reportedly straight forward relationship between reduced availability of cognitive resources and increased transference. In terms of the latter, the proposed model would suggest that transference may be more seamlessly integrated into the intergroup relations literature than is presently the case.

Transference and cognitive resources

Kruglanski and Pierro (2008) reasoned that transference would be relied upon less in impression formation when perceivers have the cognitive resources and motivation to go beyond heuristic processing of social stimuli. This flowed naturally from the social cognitive model of transference, which posits transference as an instance of memory based, or top down, impression formation. Transference is thus contrasted with data driven, or bottom up, impression formation, leading to the prediction that under conditions of reduced cognitive resource availability perceivers will rely more on transference in impression formation, in line with the cognitive miser and motivated tactician concepts of the social cognition approach. Those authors reported data consistent with that theorising: participants undertaking an impression formation task during a less optimal period in the day for cognitive processing (based on an assessment of participants' circadian rhythms) showed more signs of transference. Similar data was obtained by Pierro and Kruglanski (2008) who found that participants who were higher in NfCC were more likely to use transference in impression formation. In their studies higher NfCC can viewed as a reduced dispositional willingness to

commit cognitive resources to impression formation of newly encountered people; NfCC is thus akin to the reduced availability of cognitive resources.

The social categorisation model of transference does not look at transference as an instance of memory based processing. Indeed, the proposed social categorical understanding of transference rejects the assertion that impression formation can be usefully understood as driven by separable memory based and data based processes. This perspective is inherited from the social identity approach, which views impression formation as always founded on an interaction between perceiver based elements and stimuli based elements; specifically, perceiver readiness and comparative and normative fit (see Chapter 3). Indeed, social identity theorists have argued at length against dual process models of impression formation on a number of grounds (see Chapter 5). As part of this they have also argued against the idea that the social categorisation process exists as a resource saving device, serving to allow impression formation without substantial expenditure of effort. They instead make the case for an active social categorisation process; one that uses cognitive resources to imbue otherwise meaningless stimuli with meaning

This changes the way one might expect cognitive load to interact with social categorisation. From this perspective, reduced availability of cognitive resources can be expected to interrupt social categorisation, or otherwise make it more difficult. Put in terms of transference, a social identity understanding of the relationship between cognitive resources and social categorisation would suggest that reduced cognitive resource availability may sometimes reduce the occurrence of transference. This is because reduced cognitive resources are argued to at times impede the social categorisation process, reducing the ability for perceivers to

detect a comparatively small conceptual distance between a SO of theirs and a newly encountered target person. This can also be phrased in the opposite manner. A social categorical understanding of transference would suggest that an increase in cognitive resources may increase transference via an increased capacity to detect a comparably small conceptual distance between a SO and a target person, and subsequently construct a salient SO and target social category.

The idea that increased cognitive resources may increase transference runs directly counter to the predictions of Kruglanski and Pierro (2008), and Pierro and Kruglanski (2008). More critically, it runs counter to the results that those authors were able to obtain. Thus there is an impasse here, where the predictions of the social categorisation model of transference are apparently inconsistent with the empirical data obtained to date. Fully resolving this inconsistency is beyond the scope of this thesis, but we believe there is good reason to remain open to the idea that the relationship between cognitive resources and transference is more nuanced than has been suggested in the social psychology of transference thus far. More specifically, we believe that the understanding of the role of cognitive resource availability in transference may in the end follow a similar trajectory to the understanding of the role of cognitive load and social categorisation. In terms of that trajectory, Spears and Haslam (1997) provided a critical review of the evidence in favour of the generally accepted negative correlation between cognitive resources and social categorisation. Their review introduced good reason to question a cognitive miser or motivated tactician conclusion. By looking closely at the role of fit in relevant studies, the types of social categories investigated, inconsistencies among obtained results, as well as possible subtle confounds in experimental manipulations, the authors were able to make a case that what is

being witnessed as a far more active and “data sensitive” categorisation process than was otherwise assumed. Moreover, they reported a number of studies generally supportive of their proposed curvilinear relationship between cognitive resource availability and social categorisation.

It may be that something akin to a curvilinear relationship better captures the relationship between cognitive resource availability and transference. Looking back at the research described at the outset of this chapter section, it is notable that, as far as is reported, Kruglanski and Pierro only investigated linear relationships. We also consider it well within the realm of possibility that the suboptimal processing time experimental condition (Kruglanski & Pierro, 2008), and measurements of higher NfCC (Pierro & Kruglanski, 2008), actually both correspond to *moderate availability of cognitive resources*; moderate availability of cognitive resources, rather than low availability of cognitive resources, being the state in which Spears and Haslam predicted that social categorisation would be most apparent.

The idea that the availability of cognitive resources is not negatively correlated with transference has practical implications for those invested in the occurrence of transference outside the laboratory. A quick reading of Pierro and Kruglanski’s work, and indeed the social psychology of transference in general, may lead one to believe that transference may be interrupted or attenuated if one were to encourage the application of more cognitive resources to impression formation. In a clinical setting, for example, one might direct a patient to look more carefully at the “true” characteristics of people, or simply encourage people to take more time for their impressions. A social categorical understanding of transference gives us reason to doubt the efficacy of such an approach, where increasing

cognitive resources would not be expected to interrupt or attenuate transference. We will come back to this point in the below discussion of transference and the clinical domain, but suffice to say here that a clinician's attempts at intervention may have effects quite opposite to those that are intended.

Transference and intergroup relations

Kraus and colleagues (2010) investigated whether social category memberships may interrupt the transference of content from a SO to a newly encountered person. In their research transference was shown to occur irrespective of whether or not a newly encountered target person shared a political affiliation (Study 1) or an ethnicity (Study 2) with participants' SOs. The results of these two studies were interpreted as suggesting that transference may have a role in mitigating intergroup biases. The second study was argued to be particularly relevant to intergroup relations issues; it included a behavioural measure of social attraction, and measured the involvement of collective self-esteem in evaluation, showing that transference interrupted the role of collective self-esteem in determining evaluations of others. A key advance of this work was to connect transference with the study of intergroup relations.

At the beginning of this chapter section we stated that a social categorical understanding of transference creates the opportunity to more seamlessly integrate the transference phenomenon into the intergroup relations literature. In actuality the social categorisation model of transference would suggest stronger language than that. Rather than more seamless integration, an implication of the proposed model is that really there should be *no seams at all* between transference and the social psychology of intergroup relations. This is because, from our perspective, transference is an intergroup, or at least intragroup, process.

In Kraus and colleagues' paper a bridge is able to be built between transference and intergroup processes because in the social psychology of transference the phenomenon is an interpersonal rather than intergroup cognitive process. Moreover, as per the social cognitive model of transference, the phenomenon is a distinct interpersonal process that is uniquely characterised by the use of stored SO representations. This process is thus argued to run separately, perhaps in parallel, with cognitive processes concerning group based perception, and indeed separately to other cognitive processes concerning interpersonal perception. Using this conception of separate cognitive processes, it makes sense to ask the question, does one influence the other? Or in terms of the authors' specific questions, does intergroup processing have the capacity to interrupt transference? And conversely, does transference have the capacity to affect intergroup processing? The answers being no, and yes, respectively.

These questions can be rephrased in line with the proposed social categorical understanding of transference. The first of Kraus and colleagues' questions essentially becomes, does one salient social categorisation scheme have the capacity to interrupt the salience of another social categorisation scheme? Meanwhile, rephrasing the second question gives us something highly similar: does one salient social categorisation scheme have the capacity to affect the salience of another social categorisation scheme? The overall thrust of the enquiry then is one of questioning whether categorisation schemes influence one another, and further, whether they can interrupt one another. Across social psychology the answer to both these questions has clearly been yes. Indeed, the idea that social categorisation schemes have the capacity to influence one another is a fundamental assumption of the social categorisation literature. More specifically, it

has long been assumed that social categorisation schemes may at times inhibit one another, inform one another, and at times do neither.

In terms of inhibition, within SCT this is most obviously captured in the assumption of functional antagonism, which states that, in broad terms, the salience of one social category will mean that other alternative possible social categories will not be driving perception or behaviour. In SCT the idea that social perception involves a choice between categorisation schemes can also be understood in terms of the constraints on salience, where the perceiver readiness by fit interaction determines which categorisation scheme *among alternatives* becomes salient. Applying this to the questions above, if changes to the fit conditions, or changes to the state of the perceiver, occur in such a way that leads to the salience of one particular categorisation scheme, then we would naturally expect that the salience of alternative categorisation schemes may be diminished. After all, it is the one social categorisation process being employed to navigate the social environment. This need not always occur, and as discussed in Chapter 5 social identity theorists have always anticipated that social perception is best understood as underpinned by multiple categorisation schemes, where these multiple categorisation schemes may at times operate independently to one another. Indeed, the *knowledge partitioning* literature has shown that our mental structures are well prepared to maintain isolation between even ostensibly closely linked knowledge domains (e.g., Kalish, Lewandowsky, & Kruschke, 2004; Lewandowsky, Kalish, & Griffiths, 2000; Lewandowsky, Kalish, & Ngang, 2002). Nevertheless, it is uncontroversial to state that the salience of social categorisation schemes will at times have an inverse relationship with one another.

In terms of categorisation schemes informing one another, we encountered this in Chapter 3. In that chapter we noted SCT's expectation that social categorisation at one level of abstraction can influence social categorisation at other levels of abstraction. Reynolds and Oakes's (1999) research was a useful example for us; categorisation at a higher level of abstraction was shown in their data to influence the dimensions on which accentuation occurred at a lower level of abstraction. Again, this need not always occur, and one categorisation scheme may operate independent of other categorisation schemes. However, key to social categorisation theorising is the assumption that categorisation schemes have the capacity to shape the salience of other categorisation schemes.

Overall the social categorisation literature gives great flexibility to social categorisation, allowing categorisation schemes to inform, inhibit, or not. Kraus and colleagues' obtained results can be understood in these terms. In their first study they manipulated whether a newly encountered target person did or did not share their political orientation (i.e., the target was described as either "conservative" or "liberal"). This manipulation of political orientation did not interact with the traditional SO resemblance manipulation, where both influenced the perception of the target in the expected manner. These results can be viewed as a simple case of multiple categorisation schemes acting largely independent of one another, yet simultaneously driving impression formation. These categorisation schemes are, of course, we liberals or conservatives (or not, in the outgroup target condition), and SO and target (or not, in the low resemblance condition). In Kraus and colleagues' second study they manipulated whether a newly encountered target person did or did not share their ethnicity. Here too both the group status manipulation and the resemblance manipulation both influenced

the perception of the target. Moreover, on this occasion there was an interaction between the two manipulations: the resemblance manipulation appeared to partially interrupt the impact of the group status manipulation on target perception; specifically, in the high resemblance condition the role of collective self-esteem in driving the perception of the target appeared to diminish. Put into social categorical terms, what appears to be taking place here is that multiple categorisation schemes are simultaneously, but this time not entirely independently, driving impression formation. This is an unremarkable observation of social perceptual processes in action. The manipulation of the social environment in a way that cues one social categorisation scheme, the SO and target, appears to have partially diminished the salience of another social categorisation scheme, we ethnic group members, in the relevant experimental condition.

It is clear that by taking a social categorical perspective the apparent novelty of Kraus and colleagues' results is lessened. Changes to the salience of multiple categorisation schemes as a function of stimulus changes is not an eyebrow raising event in social psychology. Yet even if transference was understood to be a separate cognitive process to social categorisation, the novelty of the findings would remain somewhat subjective. From our perspective the natural assumption to flow from the social cognitive model of transference would still be that the transference process would inform social categorisation, inhibit social categorisation, or do neither, depending on complex perceiver and stimulus factors. It is for this reason that Kraus and colleagues introduced their own additional theorising on this topic. They argued that the political and ethnic social categories that they investigated represent a type of "core" dimension of social

perception. Group status cues, along with certain personality traits, were posited to heavily guide impression formation in a way that excludes or overpowers other possible sources of social inference. It is this additional assumption that allowed the authors to pitch their findings as an advance on our understanding of transference. However, the notion that political and ethnic social categories are core social perceptual dimensions is not generally accepted across social psychology. In fact, it is largely antithetical to the social identity approach, which emphasises, and has frequently demonstrated empirically, the context dependence of social categorisation. To give a “real world” example, any sports fan will know that a powerfully impactful social categorisation scheme in one context (e.g., state level sporting affiliation) can mean next to nothing in another (e.g., a sporting event between nations).

In sum, the results reported in Kraus and colleagues’ paper are fully explicable by way of the general social psychological understanding of multiple social categorisation. Moreover, the chief claim to novelty of those findings, that transference may occur across core dimensions of impression formation, such as social groups, rests on an assumption that does not accord with what is known about the context dependence and fluidity of social categories. In fact, if one looks back on the past two decades of experimental research into transference, it is apparent that transference has *already* been shown to occur across social groups on a number of occasions: transference has been shown to occur across university year groups (Andersen & Baum, 1994; Andersen et al., 1996; Berenson & Andersen, 2006; Saribay & Andersen, 2007), as well as across genders (Brumbaugh & Fraley, 2006). Really, there is nothing to stop one from *fully integrating* transference into the psychology of intergroup phenomenon. In line

with our own theorising, transference may be seen as a phenomenon of social categorisation that may occur within a complex system of social categorisation processes. In other words, transference is, from a cognitive process perspective, equivalent to stereotyping, social projection, self-anchoring, etc. Accordingly, it should be unsurprising that Pierro and Kruglanski (2008), while retaining the banner of transference and essentially the same methodological paradigm, actually moved away from SOs as a source of transferred content; in their second study participants were asked to nominate a “current significant leader” of theirs from the workplace and demonstrated transference to a newly encountered target from memories of that individual. The ease of moving away from SOs as part of the transference story, in our view, speaks to the largely artificial divide between transference and other social categorisation phenomena.

The Relational self

Revisiting the theory of the relational self is an opportunity for us to continue to articulate an argument that transference represents an opportunity to better integrate interpersonal and intergroup psychology. Here the rationale is the same: the distinction between transference processes, taking the form of relational selves, and other self-category processes reflects an artificial divide in the social psychological literature; one that social psychology should move past.

To recap, the relational self was viewed by Andersen and Chen (2002) to be a natural extension of the social psychology of transference. Those authors proposed that relational selves are cognitive–affective units that contain both idiographic and nomothetic content, and that relational selves develop as a reflection of the importance of SOs to our development and indeed to our everyday lives. Relational selves are said to play a substantial role in impression formation

and our subsequent response to others, to the extent that relational selves can be thought of as a basis for an interactionist model of personality.

As discussed in Chapter 2, that theory largely comprises of the same tenets as the social cognitive model of transference. The unique contribution of the theory is to argue that relational selves are a key facet of a person's personality, owing to the rich and important nature of the particular if-then relations that correspond to our SOs. These relational selves are contrasted with personal selves and social identities, where personal selves reflect the self as an independent and autonomous entity, and social identities reflect the self as experienced through group memberships. Andersen and Chen (2002) view their theory of the relational self as integrative (see also Andersen & Saribay, 2006). They suggest that positioning relational selves as akin to personal selves and social identities, as three disparate sources of personality, allows the field achieve a fuller account of personality in general. They further argue that by viewing these three sources of personality as distinct, but also sharing some equivalence, the potential interactions among those sources may be better appreciated.

Our appraisal would be that the opposite is true: the proposed theory of the relational self actually further fragments the psychology of the self. Similar to the work of Kraus and colleagues, Andersen and Chen are only able to build a bridge between the relational self and other sources of personality because prior work has been done to create an ostensive gulf between them.

The clearest way to unpack the distinction between relational selves and other sources of personality is to begin with the proposed distinction between personal selves and social identities. In Chapter 3 we saw that the social identity approach moved away from an initial understanding of personal selves, or

“personal identities”, as the realm of individual difference, or in the language of Andersen and Chen, as the realm of independence and autonomy. Within the social identity approach personal identities are now understood to also be an outcome of the self-categorisation process, albeit at a lower level of abstraction. From this perspective personal identities are an outcome of that same meaning making process applied to social stimuli, where the self is a type of stimuli, and what becomes salient is a comparatively exclusive categorisation scheme: ‘I’ or ‘me’ as can be contrasted with relevant others. These ‘I’ or ‘me’ self-categories are thus similarly fluid and responsive to any changes to the goals or motivations of the perceiver, as well as changes to the frame of reference. Just as inclusive social identities generate their meaning through a social comparison process, so to do exclusive personal identities. This is, of course, a marked departure from other conceptualisations of the personal self as found elsewhere in social psychology. We mentioned a couple of these in Chapter 2, and in general terms the key difference is that, unlike the social identity approach, alternative approaches often conceptualise the personal self as existing apart from comparison processes, capturing what many would approximate to a traditional understanding of the self; something that is stable, idiosyncratic (i.e., that which is special and unique about a person), and internal (i.e., existing irrespective of the social environment).

The existence of personal selves apart from comparison processes is generally *presumed*, rather than supported theoretically or empirically. In contrast, there is evidence that personal selves are bound up in social categorisation processes (Onorato & Turner, 2004) and the social identity approach offers a coherent theoretical account of personal selves as outcomes of social categorisation (e.g., Reynolds & Turner, 2006; Turner & Onorato, 1999). That

theoretical account is, of course, the same account used to understand social identities, which are simply comparably more inclusive self-categories. An understanding of personal selves as also outcomes of social categorisation processes is thus the more parsimonious perspective. Looking back at a proposed distinction between personal selves and social identities then, it is apparent that from a social identity perspective there is already an unnecessary fracturing of the psychology of the self. In Chapter 4 we suggested that this fracturing reflects a tendency to presume that the processing of different types of stimuli requires different cognitive systems, as well as exploring some potential reasons that psychology may be attracted to theorising along those lines.

With this as a starting point, the addition of relational selves to the self system can be seen to further *disintegrate* the psychological of the self. Andersen and Cole's theory of the relational self argues that relational selves are distinct from both social identities and personal selves because they are bound up in our experiences with our SOs. This argument is simply a continuation of the tenets of the social cognitive model of transference, which posits that transference is best understood as a distinct cognitive process, largely due to the special characteristics of SO representations. As is the case with personal selves, however, from the social identity perspective one would not expect perception involving SOs to require a separate cognitive process. This is, of course, what we have argued in Chapter 5, and in fact a large part of our central thesis: transference can be situated very happily within what is known about social categorisation processes; what is different is merely the stimuli involved in categorisation and the resulting salient social categories. We would thus also expect that relational selves may be similarly situated within a social categorisation framework. This is indeed the case, and this

can be demonstrated by revisiting the empirical work associated with the relational self theory.

The research of Saribay and Andersen (2007) was a distinct follow up to the proposed relational self theory. Those authors theorised that because relational selves and social identities, or collective selves, are closely related, content relating to social identities may be part of content transferred to a target person. They went on to suggest that if the SO shares a social identity with the perceiver then that social identity may increase in salience for that perceiver, with implications for intergroup behaviour. The results of their two studies supported these predictions. In resemblance conditions SO information concerning social identities, specifically ethnicity, did indeed become part of impression formation for the target. Further, when the SO shared their ethnicity with the perceiver that ethnicity did appear to become salient for the perceiver, as measured through signs of ingroup favouritism under appropriate conditions. Saribay and Andersen's research taps into the central premise of the theory of the relational self. The key assumption of their work is that the processes underpinning relational selves should be closely related to the processes underpinning collective selves; that is, there are two distinct but closely related processes at play in social perception of this nature.

It is possible to also understand the above results in terms of a single social categorisation process. Firstly, that information relating to ethnicity, or information about any group affiliation for that matter, may be part of category content is clearly unexceptional for a social categorisation account. Group based information is, after all, the bread and butter of the social categorisation literature. If a SO and target social category becomes salient then we would naturally expect

that ethnic information about that SO may influence the perception of the target. Similarly, it also poses no problem for a social categorisation account that the introduction of stimuli that are conceptually related to a perceiver's own ethnicity subsequently makes that ethnic identity salient to them. Here a simple multiple categorisation scheme deals with this neatly. The salient SO and target social category imbues the available social stimuli with ethnic meaning for the perceiver. Those ethnically charged social stimuli then, in turn, make salient for the perceiver another social category; this time an inclusive self-category, or social identity, that is built around ethnicity (i.e., 'we' members of our ethnicity). Here the salience of one social category makes salient a second social category, this time a self-category (cf. *secondary transfer effects*; Harwood, Paolini, Joyce, & Arroyo, 2011).

The findings of Saribay and Andersen can thus be fully explained using a social categorisation, and specifically a multiple categorisation, framework. Here no additional cognitive processes are required. In fact, as was the case with the findings of Kraus and colleagues', one might now question the novelty of these findings. Through a social categorisation lens it becomes apparent that the case for novelty rests almost entirely on the proposed distinction between a cognitive process dedicated to interpersonal stimuli and content (i.e., transference) and a cognitive process dedicated to intergroup stimuli and content (i.e., social categorisation). Without that distinction the simpler multiple social categorisation model may be applied. Bringing this explicitly back to the concept of relational selves, it is not apparent that the relational self concept adds any explanatory power to data along these lines; the appearance of explanatory power rests on a potentially spurious demarcation between interpersonal psychology and intergroup psychology.

Overall then, although the theory of the relational self is advanced as an effort toward integration of the psychology of the self, from our perspective it achieves the opposite. By arguing that relational selves are a third type of self-concept, in addition to personal selves and social identities, Andersen and Cole are actually introducing further schisms to a research space that is already overly divided. By looking at the theorising of Saribay and Andersen in relation to the data they seek to explain, we can see clearly that relational selves only serve to address a research challenge that they themselves created; that challenge being to bridge the purported gulf between interpersonal and intergroup cognitive processes. Unfortunately, this distracts from what would otherwise be a truly integrative approach. In line with the social identity approach, and as an extension specifically of our theoretical treatment of the transference phenomenon, sources of self-knowledge related to our SOs can be seen as equivalent to all other sources of self-knowledge, from a process perspective. A single social categorisation process, capable of handling multiple social categories, is available as a parsimonious and robust account of much of the observed psychology of the self.

Transference in the clinical domain

We began this thesis by touching upon the clinical origin of transference, and specifically to its roots in the psychoanalysis tradition. From there we observed that the social psychology of transference has inherited much from the clinical study of transference, but has also diverged from those origins in a number of substantial ways (see Chapter 2). Most critically for the present purposes, social psychologists interested in transference moved away from the focus on pathology and therapy and instead advocated an understanding of transference as a general perceptual process. This does not mean, however, that the social psychology of

transference has been blind to the potential implications of its research to the clinical domain. The opposite is instead the case. The social psychology of transference has often revisited the idea of transference as a clinical concern (e.g., Berenson & Andersen, 2006; Berk & Andersen, 2008; Brumbaugh & Fraley, 2006).

Messages for clinical practice

Of greatest interest to us, the social psychology of transference has explored possible implications for the management of transference and associated phenomena in a clinical setting. Andersen and Berk (1998), for instance, dedicated their paper to that topic. One key practical implication from their perspective was that clinicians should be hesitant to assess transference as pathology in therapeutic settings. This is similar to the suggestion from clinical psychologists that transference can be an ally in the therapeutic process, although Andersen and Berk provide a different rationale as to why clinicians should reserve judgement on transference. Here the ubiquity of transference, or in other words its status as an everyday perceptual phenomenon, is one reason why transference should not be thought of as inherently problematic. Andersen and Berk argue that because transference is essentially a “normal” (their quotes) social perceptual process it does not make sense to think of the phenomenon as always maladaptive; it is instead argued that transference can at times be of benefit to a perceiver. Transference therefore should only be considered as pathology under certain circumstances. The authors suggest that this will be when the extremity of transference creates enough of a departure from reality to create interpersonal problems for a perceiver, or when the content of transference is such that it leads to suffering. This approach to pathology is similar to that regularly found in versions of the Diagnostic and Statistical Manual of Mental Disorders, where

“impaired function” is included as a criterion (e.g., DSM-5; American Psychiatric Association, 2013).

Andersen and Berk go on to discuss the identification of transference in the clinical setting, as well as how one might attempt to attenuate transference, should it be decided that transference is something that needs to be attenuated. In terms of the former, identifying transference, the authors suggest that time in therapeutic settings be dedicated to discussing SOs in detail, such that transference may be more likely to be recognised should it be a factor in maladaptive interactions. Here the unconscious nature of transference is noted. Because transference is largely considered an unconscious process it is anticipated that identifying transference through client self-report may be very difficult. Nonetheless, efforts in that direction are still considered worthwhile. The authors also note the unconscious nature of transference in relation to attenuating transference. They suggest in the first instance that transference may be less likely to occur if a client can be encouraged to move toward more conscious impression formation; they suggest that therapists help “implement more deliberate information processing” (1998, p. 94) on the part of clients, which is argued to be consistent with the psychodynamic theme of “making the unconscious conscious” (1998, p. 94). Finally, the authors make the case that identifying the possible triggering cues of transference may be of benefit to a client. This again concerns the attenuation of transference, and it is posited that if the triggering cues of transference are known to the perceiver then that perceiver may be better prepared to react differently in the face of those cues.

The clinical implications of the social psychology of transference were revisited in earnest by Andersen and Przybylinski (2012), who echo much of what had been put forth by Andersen and Berk. They too make the case that

transference should not necessarily be considered pathology, and that transference can be advantageous to a perceiver. For example, Andersen and Pryzbylinki suggest that transference that leads a perceiver to form a more positive impression, or “positive transference” (cf. Freud, 1912/1950), may help a perceiver give newly encountered people the “benefit of the doubt” and thus foster warm interpersonal interactions. It is also suggested that positive transference in a clinical setting may help generate the therapeutic alliance between a client and a therapist, echoing the views of a number of psychodynamic and clinical researchers (see Chapter 2). The authors go on to suggest, again in the same vein as Andersen and Berk, that clients be encouraged to be mindful of the cues that trigger transference in a way that may help them attenuate transference in their everyday lives. Moreover, through more deliberate impression formation approaches clients may be helped to “sort out what is real and what is based on automatic implicit processes” (2012, p. 379); the anticipation being that more secure relationships will be able to be formed where there is more accurate impression formation.

In the above applications of the social psychology of transference to therapeutic contexts a particular tension is apparent. That tension is between transference as a natural, normal, everyday phenomenon, and transference as something to be eliminated or otherwise mitigated. As can be seen above, on the one hand emphasis is placed on moving away from transference as inherently pathology, and it is instead argued that transference should be assessed as adaptive or maladaptive on essentially a case-by-case basis. On the other hand, the vast majority of discussion of the practicalities of transference concerns how one might diminish or altogether eliminate the influence of transference in social

perception. Indeed, even on occasions where the possible positive implications of transference are considered, the discussion quickly returns to what is risky or problematic about the phenomenon. For instance, while Andersen and Pryzbylinki introduce the notion that positive transference involving the therapist may assist with the development of the therapeutic alliance, they spend more time elaborating on the ways in which transference involving the therapist may undermine that alliance. In fact, Andersen and Pryzbylinki describe transference in the therapeutic context as introducing something close to a paradox for the therapist: the therapist must choose between bringing the transference to the attention of the client, which may upset the client and thus erode the therapeutic alliance, or alternatively allow the transference to go on uncorrected and unchallenged, which is likely to erode the therapeutic alliance anyway. The authors in the end tentatively suggest that the former, carefully bringing the transference to the attention of the client, is more likely to lead to better outcomes. Similarly, when Andersen and Berk speak of the potential utility of transference in therapy, their observation is that if transference occurs during therapy then the therapist may use this opportunity to respond differently to that transference, thus demonstrating for the client that interpersonal interactions do not necessarily play out in accordance with their transference based expectations (cf. Weiss, 1986a; 1986b).

The influence of an objectivist metatheory

The above tension follows naturally from the social cognitive model of transference. Specifically, it follows naturally from the metatheoretical underpinnings of that model. As discussed in Chapter 4, the social cognitive model of transference is firmly grounded in the social cognition metatheory of

objectivism, where social reality is presumed to exist independent of human perception and accuracy can be achieved by perceiving stimuli for what they really are, without the biasing influence of perceiver expectations. It is through that lens that transference is understood to be an introduction of “biases, distortions, and erroneous inferences” (Andersen & Berk, 1998, p. 93). Indeed, in Chapter 4’s discussion we encountered Andersen and Berk’s assessment along these lines. They describe transference as “reality confusion” and “distortion of the real characteristics of the new person” (1998, p. 92). We also noted in that discussion that although Andersen and Pryzbylinki move some way toward a meaning making understanding of transference, they still retain the view that transference has a biasing influence on perception. In their assessment it is always true that responses driven by transference are “in a sense inappropriate, that is, in the sense of being biased” (2012, p. 372) and that identifying transference is a matter of identifying “what is real and what is based on automatic implicit processes from prior relationships” (p. 379).

With an objectivist metatheoretical background it should be no surprise that transference researchers found it difficult to truly reserve judgement about whether particular instances of transference have a positive or negative impact. Because transference is always a departure from reality, and that an accurate appraisal of reality is a necessity for effective functioning, transference is, from this perspective, always a risky prospect; any benefits of an instance of transference must outweigh its inherent accuracy costs before it can be considered adaptive. Perhaps ironically, this understanding of transference may be said to carry risks for therapeutic management of transference. For example, Wallin (2007) suggests that when engaging with transference it is important for therapists to remain

agnostic as to whether it is appropriate social perception or inappropriate social perception. Here “rejecting the traditional belief that transference is distortion” (p. 170) is encouraged so that conversations about transference do not begin with the client on the back foot; “the exploration of transference must always be grounded in the assumption that the patient’s views of the therapist have a plausible basis in the in here and now” (p. 174).

A social constructionist alternative

Fortuitously, the social categorisation model of transference brings with it an alternative metatheory, social constructionism. That metatheory allows therapists to be more open minded about the role of transference in the clinical setting, and in social perception more generally. To recap, social constructionism holds that the material world cannot be understood without engaging in some kind of perspective taking. What is accurate or factual is always influenced by the theories and beliefs that the perceiver brings with them into the perceptual process. Within social constructionism there is no objective, or *sans* theory, knowledge that can be accessed; what is “factual” is instead best understood as either a matter of individual belief, or alternatively as a matter of social consensus, depending on whether communication or shared belief is relevant to the analysis. Such an approach is, of course, highly counter intuitive to many. A common response to social constructionism, or rather rebuttal, is that while some assessments are subjective, others are clearly objective and can be verified through methods that do not rely on the knowledge or beliefs of the perceiver. McGarty and colleagues (1993), however, make the point that even those appraisals that would seem most *objectifiable* still require the application of prior knowledge and presumptions. Moreover, in order to garner agreement on what is

objectively true, that prior knowledge and those presumptions must be shared by others. Following Moscovici (1976), they give the example of the Asch line length experiments (Asch, 1951, 1955), pointing out that while one might seek to objectively resolve any disagreement by picking up a ruler and measuring line lengths, implicit in that act is the social consensus that a ruler serves as an appropriate tool by which to determine length. This, of course, is not to question the enormous practical advantage of taking for granted the measurement utility of rulers and similar tools in almost all circumstances. Social constructivism is instead intended to reflect an ever present epistemological reality; one that is seldom attended to but has received much acceptance in modern philosophy (e.g Kant, 1783/1997; Nietzsche, 1888/2004).

Social constructionism allows for an alternative conceptualisation of transference, one that is not intrinsically bound up in bias, distortion, and error. First, the salience of a SO and target category can be understood as capturing an observed social reality: from the perceiver's perspective there *actually is* a comparative equivalence between the SO and the newly encountered target and the social category is representative of that equivalence. The accentuation of within class distances, or believing that SO characteristics are also present in the target, is then a logical implication of that equivalence. In terms of that logic, expecting SO characteristics to be present in the target is akin to any other occasions where instances of a category are anticipated to possess features of that category; it is the same as expecting knives to be sharp, chairs to have legs, and trees to have branches. This is not to say that others must accept that equivalence and the deductions that follow - it is a social reality only from a particular perspective - but the perceptual process at play only entails as much distortion as

any other categorical assessment, which is to say that it is only as distorting as all other assessments.

Applying this to clinical contexts, a social constructionist approach to transference would allow a therapist to sincerely reserve judgement about the appropriateness or inappropriateness of a particular instance of transference. Further, if a judgement is made, then that judgement is much more likely to be made on the basis of whether the transference is positively or negatively affecting the client, rather than assessing the alleged degree of departure from reality. Here the presence of the transference process is irrelevant to whether that transference needs to be eliminated or mitigated. The process of transference is a perfectly legitimate manner in which to determine the social reality. A therapist may, of course, still disagree with that social reality, as agreeing that the process is legitimate does not require one to agree with the outcomes of that process. It does, however, mean that if the therapist does see reason to disagree, then the obvious next step is to investigate the inputs to that process. In other words, the natural response would be to begin a discussion with the client about the theories and beliefs that the client brings with them to social perception. Once again, this would not be to presume that those theories and beliefs are invalid, but instead to explore those beliefs together as client and therapist to determine their appropriateness. It may well be that, after exploring together the beliefs of the client, the equivalence of the SO and target becomes the decided upon "truth" of the situation. A social constructionist account of transference places the therapist and client on much more even footing when it comes to establishing consensus about social reality. The therapist here is forced to accept the limitations of their own social perceptual

tools; they must leave behind any claim to being the final arbiter of what is reality versus imagination.

A social constructionist metatheory also has practical implications for the management of transference. In particular, if an instance of transference is in the end determined to be maladaptive for a client, and consequently in need of attenuation, a social constructionist metatheory may help therapists be more realistic about how that may be expected to play out. It is relevant here to note a certain shift on this topic between the papers of Andersen and Berk (1998) and Andersen and Przybylinski (2012). In the earlier paper Andersen and Berk are optimistic about the prospects for attenuating transference. Inspired by the social cognitive literature, and in particular Fiske and Neuberg (1990), they suggest that by encouraging more effortful and piecemeal information processing transference may be avoided. Fully embedded in objectivist metatheory, the solution is for clients to examine “the *real characteristics* encountered in the new person in a systematic way” (1998, p. 100, emphasis added). As we have seen above, this is connected to mindfulness of processing, where effortful and piecemeal processing brings information processing out of the unconscious and into the conscious domain. Andersen and Przybylinski, in contrast, are more cautious about the prospects of attenuating transference. While they too suggest mindfulness and effortful processing as a potential antidote to transference, they are cognizant of research that reportedly has shown transference to persist when perceivers’ are aware of the phenomenon (Liviatan & Andersen, 2008, February; Przybylinski & Andersen, 2011, May; cf. Huguet, Galvaing, Dumas, & Monteil, 2003), and when perceivers’ are aware of the phenomenon and have heightened accuracy motivation (Przybylinski & Andersen, 2011, May). Their message is therefore that

clinicians should be prepared for substantial persistence of transference in the face of management efforts, even when the client is ostensibly on board with a therapist's transference diagnosis and is receptive to management suggestions.

A social constructionist metatheory would suggest that therapists should shift further still. Rather than expecting effortful processing to always attenuate transference, albeit often weakly, therapists should expect effortful processing and attempts to identify the "real characteristics" encountered in a new person to at times *exacerbate transference*. This is because transference is underpinned by a social categorisation process that does not run in opposition to encountered stimuli. That social categorisation process is instead partly driven by the nature of encountered stimuli. The implication of a social constructionist metatheory is therefore that scrutinising encountered stimuli may, quite legitimately, lead a perceiver to become *more confident* that their SO and a newly encountered target are indeed equivalent. Or put in terms of the social categorisation model, based on the perceiver's experience, present expectations, current motives, values, goals, and needs, a close investigation of what is comparably shared or not shared between a SO and target may lead to an increase the detected levels of comparative and normative fit, and therefore the salience of a SO and target social category. To give an example of this in action, a social constructionist metatheory can be applied to the studies reported by Andersen and Przybylinski, above. While Andersen and Przybylinski saw the persistence of transference in the face of awareness and accuracy motivation as evidence of the chronic accessibility of SO representations, which act as place holders for reality, those findings could equally be seen as reflecting the ability of participants to detect a real comparative

equivalence between their SO and a target in the face of distractions that were introduced by the experimenters into the environment.

What does this mean then for therapists who have identified transference that is in need of elimination or mitigation? What are the appropriate courses of action if a therapist cannot expect appeals to “reality” and “evidence” to naturally instil in the perceiver the therapist’s own, transference free, account of social reality? A social categorisation account of transference suggests that there are two courses of action, and the first we have already mentioned. A social constructionist metatheory does not prohibit a therapist from trying to convince a client to understand social reality differently; to come to different conclusions about their social environment. What it does suggest is that if a therapist is to make efforts in that direction then it should be a consensus building exercise conducted on a far more level playing field. They instead must accept that their own preliminary conclusions about social reality are equally as subjective as their clients’. The therapist must be prepared to accept the subjective validity of their client’s beliefs, theories, and expectations, as well as their motives and goals. Moreover, the therapist must be prepared to have their own beliefs, theories, expectations, motives and goals, subjected to scrutiny, as well as accept the potential invalidity of these from the perspective of the client. Only once this has occurred in earnest may a therapist expect to fruitfully begin the process of developing a shared understanding of social reality. That process of building a shared understanding is itself then underpinned by social categorical influence processes, where we are receptive to the ideas and beliefs of those who we view as in some way equivalent to ourselves, or in other words those who we experience as “one of us” (Turner, 1982, 1985, 1991). It is by exploring both the therapist’s and client’s beliefs,

theories, expectations, motives and goals that sources of equivalence may be identified. The antidote to the subjective relativity of social categorisation is also social categorisation. It is a psychological sense of 'us', which in a clinical setting is perhaps what the therapeutic alliance should most aim to be, that allows "human perception ... to bootstrap itself out of its own relativity" (Oakes et al., 1994, p. 210; see also Oakes & Reynolds, 1997).

The second pathway for eliminating or mitigating maladaptive transference pertains to the encountered stimuli directly. A social categorisation account of transference brings our attention to the possibility that the best course of action is to change the encountered stimuli themselves. The suggestion is that, if a client's social environment is causing them distress, or is otherwise damaging to them, then it may be most useful to remove the client from that social environment, or intervene directly in the dynamics of that social environment. Changing the social environment is, of course, something therapists will naturally consider, perhaps in the form of avoiding confrontation or spending time with friends and allies. The difference, however, is that while a social cognitive and objectivist understanding of transference would lead a therapist to first look to "correct" the client's social perception, here the client's social perception is more likely to be appreciated as valid, leading to the conclusion that it is reality that must be changed.

There is precedent for this type of shift in thinking in the clinical domain. It has been argued in relation to depression that researchers have been too quick to make attributions to the internal psychology of suffering individuals, which consequently has meant that therapy has been too focused on correcting that psychology (e.g., Beck, 1979; Ellis, 1962). Said otherwise, it has been too readily "assumed that "depressives" think in distorted ways and hence need to be taught

to think normally” (Westen, 1991, p. 188), where in actuality the opposite is true: individuals suffering depression are doing so because they are embroiled in depressing circumstances (Coyne, 1992; Coyne & Gotlib, 1983). Here too the implication is that therapy shouldn’t merely aim to manage the way clients think about, or perceive, their social environment, but should seek to engage with the social environment itself.

The cautionary tale of prejudice reduction

The shift that is being described presently, from a focus on pathological thinking to recognition of a potentially pathological social environment, mirrors the same shift that has been advocated within the intergroup relations domain. Social identity theorists have observed that the social psychology of intergroup relations has been dominated by what has been described as a *prejudice metatheory* of intergroup conflict (Turner, 1997, 2001a). That prejudice metatheory, of which the highly influential work of Allport (1954) is archetypal, has largely sought to explain intergroup conflict and negative attitudes toward collections of people by way of personality types and individual motivational drives. In doing so, that metatheory has neglected the very real intergroup circumstances that are an important determinant of intergroup attitudes. This is described as the *psychologization* of social phenomenon (Turner, 2001b), which is a type of reductionism where explanations of social phenomena are attempted in terms of individual psychology only (see also Billig, 1976; Branscombe & Spears, 2001).

Social identity theorists have argued that this psychologization has pernicious effects on the management of intergroup relations and intergroup phenomenon more broadly. Viewing intergroup conflict as a matter of individual

psychology has led researchers and practitioners to attempt prejudice reduction in a way that is fundamentally disconnected from the social environment in which that prejudice emerges. Such interventions thus attempt to reduce antipathy and unfair stereotyping without considering the possibility that antipathy and certain stereotypes are psychologically valid responses to encountered social stimuli; like transference in the clinical domain, the focus is on “fixing” a broken social perceptual process¹. The great hope of the prejudice approach to intergroup conflict, for example, is that changes to individual perceptions will gradually be followed by social change. That this will occur, however, is far from a certainty. In fact, if social perception in large part reflects the social environment, as the social identity approach suggests, then an unchanged social environment may well undo any achieved changes to individual perceptions (Banaji, Hardin, & Rothman, 1993). The consequent critique of the prejudice approach is that it is frequently ineffective as a pathway to social change, or worse, it is an ally the status quo. In relation to the latter, it is argued that the prejudice approach may serve the purpose of delegitimising a necessary management of actual intergroup differences and conflict, all the while giving the appearance that social progress is underway (Billig, 1976; Dixon & Levine, 2012; Jussim & Eccles, 1995; Jussim et al., 1995).

It is the cautionary tale of prejudice metatheory that we have applied above to transference. Our concern is that a model of transference that centres around an irrational and inaccurate individual psychology may lead to ineffective management efforts because a) clients’ social realities will in time undo any attenuation of transference that has been achieved, and b) the opportunity will be

missed to use precious therapeutic time to fruitfully explore possible changes to that social reality.

Drawing parallels with the intergroup relations literature in this way raises one more intriguing possibility for transference in clinical settings. The case has been made that something akin to prejudice may be advantageous if successful social change is to occur (Dixon et al., 2013). The argument here is that emphasising intergroup differences may help motivate attempts to eliminate those differences. Examples where a focus on intergroup difference has been arguably beneficial include the civil rights movement in the United States, the anti-apartheid moment in South Africa, and feminist movements world over. Might transference then at times have the same utility? That is, if a client's social reality is in need of social change, perhaps in terms of the company they keep or the social circles they avoid, would it be appropriate for a therapist to *create transference* in an attempt to motivate change? Given an understanding of transference as fundamentally a departure from reality, we suspect that such a suggestion would jar with the current social psychology of transference; the idea of a therapist *arguing for* a perceived equivalence between SOs and newly encountered targets would appear highly counterintuitive. Nonetheless, we also suspect that transference as a therapeutic tool could have some attraction. In fact, it would not surprise us if therapists have on occasion instilled in a client something akin to transference in an attempt to guide them away from highly damaging social situations.

Final comment

In the present chapter we have described a number of implications of the social categorisation model of transference. In relation to transference and intergroup relations and the relational self, we identified areas where greater

theoretical parsimony is achievable. In relation to transference and cognitive resource availability, we brought into question the proposed linear negative relationship between the two. Finally, and most practically, we have introduced new ideas to the ongoing discussion how best to conceptualise and manage transference in clinical practise. Here we were able to draw heavily on the intergroup relations literature, and in particular the contributions of the social identity approach. All of this was achieved by more fully integrating the transference phenomenon into the broader theoretical field of social categorisation.

It is the topic of integration within social psychology that we would like to touch on again here, at the close of this thesis. Specifically, we wish to make one more final comment on integration in social psychology as it pertains to transference. Our recurring message has been that for the social psychology of transference there exists an opportunity for far greater integration with other research streams than has been achieved thus far. In fact, we have suggested that the divide between transference research and other highly relevant social psychological research (i.e., research into cognitive and social categorisation more broadly) is a textbook case of the sort of particularisation of social psychology that is threatening to undermine the value of the field (see Chapter 4). The point we wish to make here, however, is that while this is true, in our view the study of transference that has occurred within social psychology over the last couple of decades has been of inordinate value. In particular, we believe that a great service has been performed for psychology by bringing transference out of the domain of pathology and maladaptation and giving it life as an everyday perceptual phenomenon. Further, we see the focus on transference as a distinct topic of social

psychological enquiry as entirely justified and part of a healthy diversity of research. Our emphasis on the integration of transference with the broader study of social perception should not be taken as a rebuke of the research work undertaken in this space, but instead should be viewed as an attempt to move transference forward in its journey as a social psychological topic.

Here we would repeat the suggestion of cognitive categorisation researchers Love and Gureckis that in research “diversity is desirable if findings can be eventually placed in a common theoretical framework” (2005, p. 229; see also Andersen & Saribay, 2006). We see the social psychology of transference as exactly that kind of valuable diversity, and the social categorisation model of transference proposed in this thesis as the common theoretical framework that is the next logical step. Thus, in line with Love and Gureckis’ comment, that a common theoretical framework is now available must not overshadow the hard work that has come before. Nor should our advocacy for integration be taken to suggest that there is no place for future research conducted under the specific banner of transference. Instead, we anticipate that ongoing transference research will be a necessity if we are to obtain a practical descriptive understanding of where transference is likely to occur and what impact transference is likely to have within specified contexts. In short, research into content will always be needed to complement an understanding of process.

Notes

1. The most extreme example of this disconnection that we have encountered came from Cikara and Van Bavel (2014), whose interest in prejudice reduction led them to suggest pharmacological interventions for intergroup conflict.

REFERENCES

- Abrams, D. (1999). Social identity, social cognition, and the self: The flexibility and stability of self-categorization. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 197-229). Oxford, UK: Blackwell.
- Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology, 18*(4), 317-334.
- Abrams, D., & Hogg, M. A. (1990). An introduction to the social identity approach. In D. Abrams & M. A. Hogg (Eds.), *Social identity theory: Constructive and critical advances* (pp. 1-9). Hemel Hempstead, UK: Springer-Verlag.
- Abrams, D., Thomas, J., & Hogg, M. A. (1990). Numerical distinctiveness, social identity and gender salience. *British Journal of Social Psychology, 29*(1), 87-92.
- Allport, G. W. (1954). *The nature of prejudice*. Reading, USA: Addison-Wesley.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Ames, D. R. (2004). Strategies for social inference: a similarity contingency model of projection and stereotyping in attribute prevalence estimates. *Journal of Personality and Social Psychology, 87*(5), 573-585.
- Andersen, S. M., & Baum, A. (1994). Transference in interpersonal-relations: Inferences and affect based on significant-other representations. *Journal of Personality, 62*(4), 459-497.

- Andersen, S. M., & Berenson, K. R. (2001). Perceiving, feeling, and wanting: Experiencing prior relationships in present-day interpersonal relations. In J. P. Forgas, K. D. Williams, & L. Wheeler (Eds.), *The social mind: Cognitive and motivational aspects of interpersonal behavior* (pp. 231-256). Cambridge, UK: Cambridge University Press.
- Andersen, S. M., & Berk, M. S. (1998). Transference in everyday experience: Implications of experimental research for relevant clinical phenomena. *Review of General Psychology, 2*(1), 81-120.
- Andersen, S. M., & Chen, S. (2002). The relational self: An interpersonal social-cognitive theory. *Psychological Review, 109*(4), 619-645.
- Andersen, S. M., & Cole, S. W. (1990). "Do I know you?": The role of significant others in general social perception. *Journal of Personality and Social Psychology, 59*(3), 384-399.
- Andersen, S. M., & Glassman, N. S. (1996). Responding to significant others when they are not there: Effects on interpersonal inference, motivation, and affect. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition* (Vol. 3, pp. 262-321). New York, USA: Guilford Press.
- Andersen, S. M., Glassman, N. S., Chen, S., & Cole, S. W. (1995). Transference in social perception: The role of chronic accessibility in significant-other representations. *Journal of Personality and Social Psychology, 69*(1), 41-57.
- Andersen, S. M., & Klatzky, R. L. (1987). Traits and social stereotypes: Levels of categorization in person perception. *Journal of Personality and Social Psychology, 53*(2), 235-246.

- Andersen, S. M., & Przybylinski, E. (2012). Experiments on transference in interpersonal relations: Implications for treatment. *Psychotherapy, 49*(3), 370-383.
- Andersen, S. M., Reznik, I., & Chen, S. (1997). The self in relation to others: Cognitive and motivational underpinnings *Self across psychology: Self-recognition, self-Awareness, and the self concept* (Vol. 818, pp. 233-&).
- Andersen, S. M., Reznik, I., & Manzella, L. M. (1996). Eliciting facial affect, motivation, and expectancies in transference: Significant-other representations in social relations. *Journal of Personality and Social Psychology, 71*(6), 1108-1129.
- Andersen, S. M., & Saribay, S. A. (2005). The relational self and transference: evoking motives, self-regulation, and emotions through activation of mental representations of significant others. In M. W. Baldwin (Ed.), *Interpersonal cognition* (pp. 1-32). New York, USA: Guilford Press.
- Andersen, S. M., & Saribay, S. A. (2006). Thinking integratively about social psychology: The example of the relational self and the social-cognitive process of transference. In P. A. M. Van Lange (Ed.), *Bridging social psychology: Benefits of transdisciplinary approaches* (pp. 199-205). Mahwah, USA: Laurence Erlbaum Associates.
- Anderson, N. H. (1968). Likableness ratings of 555 personality-trait words. *Journal of Personality and Social Psychology, 9*(3), 272-279.
- Antill, J. K., Cunningham, J. D., Russell, G., & Thompson, N. L. (1981). An Australian sex-role scale. *Australian Journal of Psychology, 33*(2), 169-183.
- Appley, M. H. (1990). Time for reintegration. *Science Agenda, 3*(1), 12-13.

- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*(4), 596-612.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology, 60*(2), 241-253.
- Aron, A., & Fraley, B. (1999). Relationship closeness as including other in the self: Cognitive underpinnings and measures. *Social Cognition, 17*(2), 140-160.
- Asch, S. E. (1951). Effects of group pressure upon the modification and distortion of judgments. In H. E. Guetzkow (Ed.), *Groups, leadership and men: Research in human relations* (pp. 222-236). Oxford, UK: Carnegie Press.
- Asch, S. E. (1955). Opinions and social pressure. *Scientific American, 193*, 31-35.
- Baldwin, M. W., & Sinclair, L. (1996). Self-esteem and "if... then" contingencies of interpersonal acceptance. *Journal of Personality and Social Psychology, 71*(6), 1130-1141.
- Barlow, F. K., Paolini, S., Pedersen, A., Hornsey, M. J., Radke, H. R., Harwood, J., ... & Sibley, C. G. (2012). The contact caveat negative contact predicts increased prejudice more than positive contact predicts reduced prejudice. *Personality and Social Psychology Bulletin, 38*(12), 1629-1643.
- Banaji, M. R., Hardin, C., & Rothman, A. J. (1993). Implicit stereotyping in person judgment. *Journal of Personality and Social Psychology, 65*(2), 272.
- Bandura, A. (1969). *Principles of behavior modification*. New York, USA: Holt, Rinehart and Winston.

- Bargh, J. A. (1989). Conditional automaticity: Varieties of automatic influence in social perception and cognition. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought* (Vol. 3, pp. 51-69). New York, USA: Guilford Press.
- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In J. Wyer, R. S. & T. K. Srull (Eds.), *Handbook of social cognition* (2nd ed., Vol. 1, pp. 1-40). Hillsdale, USA: Erlbaum.
- Bargh, J. A., Lombardi, W. J., & Higgins, E. T. (1988). Automaticity of chronically accessible constructs in person \times situation effects on person perception: It's just a matter of time. *Journal of Personality and Social Psychology*, *55*(4), 599-605.
- Barnum, C., & Markovsky, B. N. (2007). Group membership and social influence. *Current Research in Social Psychology*, *13*(3), 22-38.
- Barsalou, L. W. (1983). Ad hoc categories. *Memory and Cognition*, *11*(3), 211-227.
- Barsalou, L. W. (1987). The instability of graded structure: Implications for the nature of concepts. In U. Neisser (Ed.), *Concepts and conceptual development: Ecological and intellectual factors in categorization* (pp. 101-140). Cambridge, UK: Cambridge University Press.
- Baum, A., & Andersen, S. M. (1999). Interpersonal roles in transference: Transient mood effects under the condition of significant-other resemblance. *Social Cognition*, *17*(2), 161-185.
- Baumeister, R. F. (1988). Should we stop studying sex differences altogether? *The American Psychologist*, *43*(12), 1092-1095.

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497-523.
- Beck, A. T. (1979). *Cognitive therapy and the emotional disorders*. New York, USA: Penguin.
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155-162.
- Berenson, K. R., & Andersen, S. M. (2006). Childhood physical and emotional abuse by a parent: Transference effects in adult interpersonal relations. *Personality and Social Psychology Bulletin, 32*(11), 1509-1522.
- Berk, M. S., & Andersen, S. M. (2000). The impact of past relationships on interpersonal behavior: Behavioral confirmation in the social-cognitive process of transference. *Journal of Personality and Social Psychology, 79*(4), 546-562.
- Berk, M. S., & Andersen, S. M. (2008). The sting of lack of affection: Chronic goal dissatisfaction in transference. *Self and Identity, 7*(4), 393-412.
- Berkowitz, L., & Devine, P. G. (1989). Research traditions, analysis, and synthesis in social psychological theories: The case of dissonance theory. *Personality and Social Psychology Bulletin, 15*(4), 493-507.
- Berndsen, M., Spears, R., van der Pligt, J., McGarty, C., & Yzerbyt, Y. (2002). Illusory correlation and stereotype formation: Making sense of group differences and cognitive biases, *Stereotypes as explanations: The formation of meaningful beliefs about social groups* (pp. 90-110). Cambridge, UK: Cambridge University Press.

- Billig, M. (1976). *Social Psychology and Intergroup Relations*. London, UK: Academic Press
- Billig, M. (1996a). *Arguing and thinking: A rhetorical approach to social psychology*. Cambridge, UK: Cambridge University Press.
- Billig, M. (1996b). Remembering the particular background of social identity theory. In W. P. Robinson (Ed.), *Social groups and identities: Developing the legacy of Henri Tajfel* (pp. 337-357). Oxford, UK: Butterworth-Heinemann.
- Blair, I. V., & Banaji, M. R. (1996). Automatic and controlled processes in stereotype priming. *Journal of Personality and Social Psychology*, 70(6), 1142-1163.
- Blok, S., Newman, G., & Rips, L. J. (2005). Individuals and their concepts. In W. Ahn, R. L. Goldstone, B. C. Love, A. B. Markman, & P. Wolff (Eds.), *Categorization inside and outside the lab: Essays in honor of Douglas L. Medin* (pp. 127-149). Washington, USA: American Psychological Association.
- Bowlby. (1969). *Attachment and loss: Attachment* (Vol. 1). New York, USA: Basic Books.
- Branscombe, N. R., & Spears, R. (2001). Social psychology: Past, present, and some predictions for the future. In J. S. Halonen & S. F. Davis (Eds.), *The many faces of psychological research in the 21st century* (pp. 133-164): Society for the Teaching of Psychology. Retrieved from http://teachpsych.org/ebooks/faces/index_faces.php.
- Breuer, J., & Freud, S. (1895/2000). *Studies on hysteria*. New York, USA: Basic Books.
- Brewer, M. B. (1988). A dual process model of impression formation. In T. K. Scrull & J. Wyer, R. S. (Eds.), *Advances in social cognition* (Vol. 1, pp. 1-36). Hillsdale, USA: Psychology Press.

- Brewer, M. B., & Gaertner, S. L. (2001). Toward reduction of prejudice: intergroup contact and social categorization. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 451-472). Malden, USA: Blackwell.
- Brewer, M. B., & Gardner, W. (1996). Who is this "we"? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, 71(1), 83-93.
- Brown, P. M., & Turner, J. C. (2002). The role of theories in the formation of stereotype content. In C. McGarty, V. Y. Yzerbyt, & R. Spears (Eds.), *Stereotypes as explanations: The formation of meaningful beliefs about social groups* (pp. 67-89). Cambridge, UK: Cambridge University Press.
- Brown, R. (2000). Social identity theory: Past achievements, current problems and future challenges. *European Journal of Social Psychology*, 30(6), 745-778.
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 255-342). San Diego, CA: Elsevier
- Brown, S. D., & Lunt, P. (2002). A genealogy of the social identity tradition: Deleuze and Guattari and social psychology. *British Journal of Social Psychology*, 41(1), 1-23.
- Brumbaugh, C. C., & Fraley, R. C. (2006). Transference and attachment: How do attachment patterns get carried forward from one relationship to the next? *Personality and Social Psychology Bulletin*, 32(4), 552-560.
- Bruner, J. S. (1957). On perceptual readiness. *Psychological Review*, 64(2), 123-152.
- Bruner, J. S., & Postman, L. (1948). Symbolic value as an organising factor in perception. *The Journal of Social Psychology*, 27(2), 203-208.

- Cadinu, M. R., & Rothbart, M. (1996). Self-anchoring and differentiation processes in the minimal group setting. *Journal of Personality and Social Psychology*, 70(4), 661-677.
- Campbell, D. T. (1956). Enhancement of contrast as composite habit. *The Journal of Abnormal and Social Psychology*, 53(3), 350.
- Campbell, D. T. (1958). Common fate, similarity, and other indices of the status of aggregates of persons as social entities. *Behavioral Science*, 3(1), 14-25.
- Cantor, N., & Mischel, W. (1979). Prototypes in person perception. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 12, pp. 3-52). New York, USA: Academic Press.
- Carson, R. C. (1969). *Interaction concepts of personality*. Chicago, USA: Aldine.
- Chen, S., & Andersen, S. M. (1999). Relationships from the past in the present: Significant-other representations and transference in interpersonal life. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 31, pp. 123-190). San Diego, USA: Academic Press.
- Chen, S., Andersen, S. M., & Hinkley, K. (1999). Triggering transference: Examining the role of applicability in the activation and use of significant-other representations in social perception. *Social Cognition*, 17(3), 332-365.
- Cikara, M., & Van Bavel, J. J. (2014). The neuroscience of intergroup relations an integrative review. *Perspectives on Psychological Science*, 9(3), 245-274.
- Coats, S., Smith, E. R., Claypool, H. M., & Banner, M. J. (2000). Overlapping mental representations of self and in-group: Reaction time evidence and its relationship with explicit measures of group identification. *Journal of Experimental Social Psychology*, 36(3), 304-315.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, USA: Lawrence Earlbaum Associates.
- Conrey, F. R., & Smith, E. R. (2007). Attitude representation: Attitudes as patterns in a distributed, connectionist representational system. *Social Cognition*, 25(5), 718-735.
- Corneille, O., & Judd, C. M. (1999). Accentuation and sensitization effects in the categorization of multifaceted stimuli. *Journal of Personality and Social Psychology*, 77(5), 927-941.
- Coyne, J. C. (1992). Cognition in depression: A paradigm in crisis. *Psychological Inquiry*, 3(3), 232-235.
- Coyne, J. C., & Gotlib, I. H. (1983). The role of cognition in depression: A critical appraisal. *Psychological Bulletin*, 94(3), 472-505.
- Deaux, K. (1991). Social identities: Thoughts on structure and change. In R. C. Curtis (Ed.), *The relational self: Theoretical convergences in psychoanalysis and social psychology* (pp. 77-93). New York, USA: Guilford.
- DeCarlo, L. T. (1998). Signal detection theory and generalized linear models. *Psychological Methods*, 3(2), 186-205.
- Dixon, J., Durrheim, K., Kerr, P., & Thomae, M. (2013). 'What's so funny 'bout peace, love and understanding?' Further reflections on the limits of prejudice reduction as a model of social change. *Journal of Social and Political Psychology*, 1(1), 239-252.
- Dixon, J., & Levine, M. (2012). *Beyond prejudice: Extending the social psychology of conflict, inequality and social change*. Cambridge, UK: Cambridge University Press.

- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology, 70*(6), 1327-1343.
- Dukes, W. F., & Bevan Jr, W. (1952a). Accentuation and response variability in the perception of personally relevant objects. *Journal of Personality, 20*(4), 457-465.
- Dukes, W. F., & Bevan Jr, W. (1952b). Size estimation and monetary value: a correlation. *The Journal of Psychology, 34*(1), 43-53.
- Dunnette, M. D. (1966). Fads, fashions, and folderol in psychology. *American Psychologist, 21*(4), 343.
- Eiser, J. R. (1996). Accentuation revisited. In W. P. Robinson (Ed.), *Social groups and identities: Developing the legacy of Henri Tajfel* (pp. 121-142). Oxford, UK: Butterworth-Heinemann.
- Ellemers, N., & Barreto, M. (2001). The impact of relative group status: Affective, perceptual and behavioral consequences. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 325-343). Malden, USA: Blackwell.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York, USA: Lyle Stuart
- Endler, N. S. (1984). Interactionism. In N. S. Endler & J. M. Hunt (Eds.), *Personality and the Behavioral Disorders* (Vol. 1, pp. 183-217). New York, USA: Wiley.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*(2), 175-191.
- Fenichel, O. (1939). Problems of psychoanalytic technique. *The Psychoanalytic Quarterly, 8*, 438-470.

- Fernández-Armesto, F. (2009). *1492: The year our world began*. London, UK: Bloomsbury.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, *11*(2), 77-83.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, *82*(6), 878-902.
- Fiske, S. T., & Neuberg, S. L. (1990). A continuum of impression formation, from category-based to individuating processes: Influences of information and motivation on attention and interpretation. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 1-73). San Diego, USA: Academic Press.
- Fiske, S. T., & Pavelchak, M. A. (1986). Category-based versus piecemeal-based affective responses: Developments in schema-triggered affect. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 1, pp. 167-203). New York, USA: Guilford Press.
- Fiske, S. T., & Taylor, S. E. (1984). *Social cognition* (1 ed.). New York, USA: McGraw-Hill.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2 ed.). New York, USA: McGraw-Hill.
- Fowler, R. D. (1990). Psychology: The core discipline. *American Psychologist*, *45*(1), 1-6.

- Freud, S. (1905/2006). Fragment of an analysis of a case of hysteria (Dora). In J. Johnson (Ed.), *The psychology of love* (pp. 1-109). Camberwell, AUS: Penguin.
- Freud, S. (1912/1950). The dynamics of transference. In E. Jones (Ed.), *Sigmund Freud, M.D., LL.D.: collected papers* (Vol. 2, pp. 312-322). London, UK: Hogarth Press.
- Freud, S. (1915/1993). Observations on transference-love: Further recommendations on the technique of psycho-analysis III. *Journal of Psychotherapy Practice and Research*, 2(2), 171-180.
- Freud, S. (1940). *An outline of psychoanalysis*. London, UK: Hogarth Press.
- Funder, D. C. (1995). Stereotypes, base rates, and the fundamental attribution mistake: A content-based approach to judgmental accuracy. In Y. Lee, L. J. Jussim, & C. R. McCauley (Eds.), *Stereotype accuracy: Toward appreciating group differences* (pp. 141-156). Washington, USA: American Psychological Association.
- Gentner, D., & Kurtz, K. J. (2005). Relational categories. In W. Ahn, R. L. Goldstone, B. C. Love, A. B. Markman, & P. Wolff (Eds.), *Categorization inside and outside the lab: Essays in honor of Douglas L. Medin* (pp. 151-175). Washington, USA: American Psychological Association.
- Glassman, N. S., & Andersen, S. M. (1999). Activating transference without consciousness: Using significant-other representations to go beyond what is subliminally given. *Journal of Personality and Social Psychology*, 77(6), 1146-1162.
- Greenson, R. R. (1965). The working alliance and the transference neurosis. *The Psychoanalytic Quarterly*, 34, 155-181.

- Harwood, J., Paolini, S., Joyce, N., Rubin, M., & Arroyo, A. (2011). Secondary transfer effects from imagined contact: Group similarity affects the generalization gradient. *British Journal of Social Psychology, 50*(1), 180-189.
- Haslam, S. A. (2001). *Psychology in organizations*. London, UK: SAGE.
- Haslam, S. A. (2014). Making good theory practical: Five lessons for an Applied Social Identity Approach to challenges of organizational, health, and clinical psychology. *British Journal of Social Psychology, 53*(1), 1-20.
- Haslam, S. A., Adarves-Yorno, I., Postmes, T., & Jans, L. (2013). The collective origins of valued originality: A social identity approach to creativity. *Personality and Social Psychology Review, 17*(4), 384-401.
- Haslam, S. A., & Ellemers, N. (2005). Social identity in industrial and organizational psychology: Concepts, controversies and contributions. *International Review of Industrial and Organizational Psychology, 20*(1), 39-118.
- Haslam, S. A., Ellemers, N., Reicher, S., Reynolds, K. J., & Schmitt, M. T. (2010). The social Identity Perspective Today: The impact of Its defining ideas. In T. Postmes & N. R. Branscombe (Eds.), *Rediscovering social identity: Core sources* (pp. 341-356). New York, USA: Psychology Press.
- Haslam, S. A., Jetten, J., & Waghorn, C. (2009). Social identification, stress and citizenship in teams: a five-phase longitudinal study. *Stress and Health, 25*(1), 21-30.
- Haslam, S. A., & McGarty, C. (2001). A 100 years of certitude? Social psychology, the experimental method and the management of scientific uncertainty. *British Journal of Social Psychology, 40*(1), 1-21.

- Haslam, S. A., McGarty, C., & Brown, P. M. (1996). The search for differentiated meaning is a precursor to illusory correlation. *Personality and Social Psychology Bulletin*, 22(6), 611-619.
- Haslam, S. A., Oakes, P. J., Reynolds, K. J., & Turner, J. C. (1999). Social identity salience and the emergence of stereotype consensus. *Personality and Social Psychology Bulletin*, 25(7), 809-818.
- Haslam, S. A., Oakes, P. J., Turner, J. C., & McGarty, C. (1995). Social categorization and group homogeneity: Changes in the perceived applicability of stereotype content as a function of comparative context and trait favourableness. *British Journal of Social Psychology*, 34(2), 139-160.
- Haslam, S. A., Reicher, S., & Platow, M. J. (2011). *The new psychology of leadership: Identity, influence and power*. Hove, UK: Psychology Press.
- Haslam, S. A., & Turner, J. C. (1992). Context-dependent variation in social stereotyping 2: The relationship between frame of reference, self-categorization and accentuation. *European Journal of Social Psychology*, 22(3), 251-277.
- Haslam, S. A., & Turner, J. C. (1995). Context dependent variation in social stereotyping 3: Extremism as a self categorical basis for polarized judgement. *European Journal of Social Psychology*, 25(3), 341-371.
- Haslam, S. A., Turner, J. C., Oakes, P. J., McGarty, C., & Hayes, B. K. (1992). Context dependent variation in social stereotyping 1: The effects of intergroup relations as mediated by social change and frame of reference. *European Journal of Social Psychology*, 22(1), 3-20.

- Haslam, S. A., Turner, J. C., Oakes, P. J., McGarty, C., & Reynolds, K. J. (1997). The group as a basis for emergent stereotype consensus. *European Review of Social Psychology, 8*(1), 203-239.
- Helson, H. (1964). *Adaptation-level theory: An experimental and systematic approach to behavior*. New York, USA: Harper and Row.
- Higgins, E. T. (1987). Self-discrepancy: a theory relating self and affect. *Psychological Review, 94*(3), 319-340.
- Higgins, E. T., & King, G. A. (1981). Accessibility of social constructs: Information processing consequences of individual and contextual variability. In N. Cantor & J. F. Kihlstrom (Eds.), *Personality, cognition and social interaction* (pp. 69-121). Hillsdale, USA: Lawrence Erlbaum Associates.
- Hinkley, K., & Andersen, S. M. (1996). The working self-concept in transference: Significant-other activation and self change. *Journal of Personality and Social Psychology, 71*(6), 1279-1295.
- Hogg, M. A. (2001). Self-categorization and subjective uncertainty resolution: Cognitive and motivational facets of social identity and group membership. In J. P. Forgas, K. D. Williams, & L. Wheeler (Eds.), *The social mind: Cognitive and motivational aspects of interpersonal behavior* (pp. 323-249). Cambridge, UK: Cambridge University Press.
- Hogg, M. A. (2005). One of us: Social identity, group belonging and leadership. *Center for Public Leadership Working Paper Series, 5*, 3-21.
- Hogg, M. A., & Abrams, D. (1988). *Social identifications: A social psychology of intergroup relations and group processes*. London, UK: Psychology Press.

- Hogg, M. A., & Abrams, D. (1999). Social identity and social cognition: Historical background and current trends. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 1-25). Oxford, UK: Blackwell.
- Hogg, M. A., & Mullin, B. A. (1999). Joining groups to reduce uncertainty: Subjective uncertainty reduction and group identification. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 248-279). Oxford, UK: Blackwell.
- Hogg, M. A., & Turner, J. C. (1987a). Intergroup behaviour, self-stereotyping and the salience of social categories. *British Journal of Social Psychology*, 26(4), 325-340.
- Hogg, M. A., & Turner, J. C. (1987b). Social identity and conformity: A theory of referent informational influence. In W. Doise & S. Moscovici (Eds.), *Current issues in european social psychology* (Vol. 2, pp. 139-177). Cambridge, UK: Cambridge University Press.
- Hogg, M. A., & Williams, K. D. (2000). From *I* to *we*: Social identity and the collective self. *Group Dynamics: Theory, Research, and Practice*, 4(1), 81-97.
- Horney, K. (1939). *New ways in psychoanalysis*. London, UK: Routledge and Kagen Paul.
- Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204-222.
- Huguet, P., Galvaing, M. P., Dumas, F., & Monteil, J. (2003). The social influence of automatic responding: Controlling the uncontrollable. In J. P. Forgas, K. D. Williams, & L. Wheeler (Eds.), *The social mind: Cognitive and motivational aspects of interpersonal behavior* (pp. 371-388). Cambridge, UK: Cambridge University Press.

- Jacoby, L. L. (1983). Perceptual enhancement: Persistent effects of an experience. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 9(1), 21-38.
- Jaeger, T. F. (2008). Categorical data analysis: Away from ANOVAs (transformation or not) and towards logit mixed models. *Journal of Memory and Language*, 59(4), 434-446.
- James, W. (1890/1950). *The principles of psychology* (Vol. 2): Dover.
- Jenkins, R. (1996). *Social identity*. London, UK: Routledge.
- Jetten, J., Haslam, C., & Haslam, S. A. (2012). *The social cure: Identity, health and well-being*. Hove, UK: Psychology Press.
- Jetten, J., & Postmes, T. (2006). Introduction: the puzzle of individuality and the group. In T. Postmes, & J. Jetten (Eds.), *Individuality and the group: Advances in social identity* (pp. 1-10). London, UK: SAGE.
- Jussim, L. J., & Eccles, J. (1995). Are teacher expectations biased by students' gender, social class, or ethnicity? In Y. Lee, L. J. Jussim, & C. R. McCauley (Eds.), *Stereotype accuracy: Toward appreciating group differences* (pp. 245-271). Washington, USA: American Psychological Association.
- Jussim, L. J., McCauley, C. R., & Lee, Y. (1995). Why study stereotype accuracy and inaccuracy. In Y. Lee, L. J. Jussim, & C. R. McCauley (Eds.), *Stereotype accuracy: Toward appreciating group differences* (pp. 3-27). Washington, USA: American Psychological Association.
- Kalish, M. L., Lewandowsky, S., & Kruschke, J. K. (2004). Population of linear experts: Knowledge partitioning and function learning. *Psychological Review*, 111(4), 1072-1099. doi:10.1037/0033-295x.111.4.1072

- Kant, I. (1783/1997). *Prolegomena to any future metaphysics that can qualify as a science*. Chicago, USA: Open Court.
- Karylowski, J. J., Konarzewski, K., & Motes, M. A. (2000). Recruitment of exemplars as reference points in social judgments. *Journal of Experimental Social Psychology, 36*(3), 275-303.
- Kashima, Y., Gurumurthy, A. K., Ouschan, L., Chong, T., & Mattingley, J. (2007). Connectionism and self: James, Mead, and the stream of enculturated consciousness. *Psychological Inquiry, 18*(2), 73-96.
- Kerr, N. L. (1998). HARKing: Hypothesizing after the results are known. *Personality and Social Psychology Review, 2*(3), 196-217.
- Koch, S. (1993). "Psychology" or "the psychological studies"? *American Psychologist, 48*(8), 902-904.
- Kraus, M. W., & Chen, S. (2010). Facial-feature resemblance elicits the transference effect. *Psychological Science, 21*(4), 518-522.
- Kraus, M. W., Chen, S., Lee, V. A., & Straus, L. D. (2010). Transference occurs across group boundaries. *Journal of Experimental Social Psychology, 46*(6), 1067-1073.
- Krueger, J. I. (2007). From social projection to social behaviour. *European Review of Social Psychology, 18*(1).
- Kruglanski, A. W. (2004). *The psychology of closed mindedness*. New York, USA: Psychology Press.
- Kruglanski, A. W., & Pierro, A. (2008). Night and day, you are the one: On circadian mismatches and the transference effect in social perception. *Psychological Science, 19*(3), 296-301.

- Kruglanski, A. W., Pierro, A., Mannetti, L., & De Grada, E. (2006). Groups as epistemic providers: Need for closure and the unfolding of group-centrism. *Psychological Review*, *113*(1), 84-100.
- Kruglanski, A. W., & Webster, D. M. (1996). Motivated closing of the mind: "Seizing" and "freezing". *Psychological Review*, *103*(2), 263-283.
- Labiouse, C. L. (2004). Is there a real preferential detection of negative stimuli? A comment on Dijksterhuis and Aarts (2003). *Psychological Science*, *15*(5), 364-365.
- Lee, Y., & Duenas, G. (1995). Stereotype accuracy in multicultural business. In Y. Lee, L. J. Jussim, & C. R. McCauley (Eds.), *Stereotype accuracy: Toward appreciating group differences* (pp. 157-186). Washington, USA: American Psychological Association.
- Lewandowsky, S., Kalish, M., & Griffiths, T. L. (2000). Competing strategies in categorization: Expediency and resistance to knowledge restructuring. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *26*(6), 1666-1684.
- Lewandowsky, S., Kalish, M., & Ngang, S. K. (2002). Simplified learning in complex situations: Knowledge partitioning in function learning. *Journal of Experimental Psychology: General*, *131*(2), 163-193.
- Lippmann, W. (1922/2007). *Public opinion*: Nu Vision.
- Liviatan, I., & Andersen, S. M. (2008, February). *Just try to stop yourself: Can awareness help people regulate transference*. Paper presented at the Society for Personality and Social Psychology Conference, Albuquerque, USA.

- Lobel, S. A., & St. Clair, L. (1992). Effects of family responsibilities, gender, and career identity salience on performance outcomes. *Academy of management journal*, 35(5), 1057-1069.
- Locksley, A., Stangor, C., Hepburn, C., Grosovsky, E., & Hochstrasser, M. (1984). The ambiguity of recognition memory tests of schema theories. *Cognitive Psychology*, 16(4), 421-448.
- Long, K., & Spears, R. (1997). The self-esteem hypothesis revisited: Differentiation and the disaffected. In R. Spears, P. J. Oakes, N. Ellemers, & S. A. Haslam (Eds.), *The social psychology of stereotyping and group life* (pp. 296-317). Oxford, UK: Blackwell.
- Love, B. C., & Gureckis, T. M. (2005). Modeling learning under the influence of culture. In W. Ahn, R. L. Goldstone, B. C. Love, A. B. Markman, & P. Wolff (Eds.), *Categorization inside and outside the laboratory: Essays in honor of Douglas L. Medin* (pp. 229-248). Washington, USA: American Psychological Association.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18(3), 302-318.
- Macrae, C. N., & Bodenhausen, G. V. (2000). Social cognition: Thinking categorically about others. *Annual Review of Psychology*, 51, 93-120.
- Macrae, C. N., Bodenhausen, G. V., Milne, A. B., Thorn, T. M. J., & Castelli, L. (1997). On the activation of social stereotypes: The moderating role of processing objectives. *Journal of Experimental Social Psychology*, 33(5), 471-489.

- Magnusson, D. (1990). Personality development from an interactional perspective. In L. A. Parvin (Ed.), *Handbook of personality* (pp. 193-222). New York, USA: Guilford Press.
- Mahoney, M. J., & Thorenson, C. E. (1974). *Self-control: Power to the person*. Monterey, USA: Brooks/Cole.
- Markman, A. B. (2005). What are categories and why are they coherent? In W. Ahn, R. L. Goldstone, B. C. Love, A. B. Markman, & P. Wolff (Eds.), *Categorization inside and outside the lab: Essays in honor of Douglas L. Medin* (pp. 215-227). Washington, USA: American Psychological Association.
- Markovsky, B. N. (1994). The structure of theories. In M. Foschi & E. J. Lawler (Eds.), *Group processes: Sociological analyses*. Chicago, USA: Nelson-Hall.
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38(1), 299-337.
- Martiny, S. E., & Rubin, M. (2016). Towards a clearer understanding of social identity theory's self-esteem hypothesis. In S. McKeown, R. Haji, & N. Ferguson (Eds.), *Understanding Peace and Conflict Through Social Identity Theory* (pp. 19-32). Springer International Publishing.
- Mascaro, G. F., & Graves, W. (1973). Contrast effects of background factors on the similarity-attraction relationship. *Journal of Personality and Social Psychology*, 25(3), 346-350.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396.
- Maslow, A. H. (1972). Management as a psychological experiment. In W. R. Nord (Ed.), *Concepts and controversy in organizational behaviour* (2 ed., pp. 98-102). Pacific Palisades, USA: Goodyear.

- McConnell, A. R. (2010). The multiple self-aspects framework: Self-concept representation and its implications. *Personality and Social Psychology Review, 15*(1), 3-27.
- McGarty, C. (1999). *Categorization in social psychology*. London, UK: SAGE.
- McGarty, C. (2001). Social identity theory does not maintain that identification produces bias, and self-categorization Theory does not maintain that salience is identification: Two comments on Mummendey, Klink and Brown. *British Journal of Social Psychology, 40*(2), 173-176.
- McGarty, C. (2002). Stereotype formation as category formation. In C. McGarty, V. Y. Yzerbyt, & R. Spears (Eds.), *Stereotypes as explanations: The formation of meaningful beliefs about social groups* (pp. 16-37). Cambridge, UK: Cambridge University Press.
- McGarty, C. (2006). Hierarchies and minority groups: The roles of salience, overlap, and background knowledge in selecting meaningful social categorisations from multiple alternatives. In R. J. Crisp & M. Hewstone (Eds.), *Multiple social categorization: Processes, models, and applications* (pp. 25-49). Hove, UK: Psychology Press.
- McGarty, C., Haslam, S. A., Turner, J. C., & Oakes, P. J. (1993). Illusory correlation as accentuation of actual intercategory difference: Evidence for the effect with minimal stimulus information. *European Journal of Social Psychology, 23*(4), 391-410.
- McGarty, C., & Penny, R. E. C. (1988). Categorization, accentuation, and social judgment. *British Journal of Social Psychology, 27*(2), 147-157.
- McGarty, C., & Turner, J. C. (1992). The effects of categorization on social judgement. *British Journal of Social Psychology, 31*(4), 253-268.

- McGarty, C., Turner, J. C., Oakes, P. J., & Haslam, S. A. (1993). The creation of uncertainty in the influence process: The roles of stimulus information and disagreement with similar others. *European Journal of Social Psychology*, 23(1), 17-38.
- Medin, D. L. (1989). Concepts and conceptual structure. *American Psychologist*, 44(12), 1469-1481.
- Medin, D. L., Goldstone, R. L., & Gentner, D. (1993). Respects for similarity. *Psychological Review*, 100(2), 254-278.
- Medin, D. L., & Wattenmaker, W. D. (1987). Category cohesiveness, theories, and cognitive archeology. In U. Neisser (Ed.), *Concepts and conceptual development: Ecological and intellectual factors in categorization* (pp. 25-62). New York, USA: Cambridge University Press.
- Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, 80(4), 252-283.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102(2), 246-268.
- Moscovici, S. (1976). *Social influence and social change*. London, UK, Academic Press.
- Murphy, G. L. (2005). The study of concepts inside and outside the laboratory: Medin versus Medin. In W. Ahn, R. L. Goldstone, B. C. Love, A. B. Markman, & P. Wolff (Eds.), *Categorization inside and outside the lab: Essays in honor of Douglas L. Medin* (pp. 179-195). Washington, USA: American Psychological Association.

- Murphy, G. L., & Medin, D. L. (1985). The role of theories in conceptual coherence. *Psychological Review*, 92(3), 289-316.
- Murphy, K. R. (2008). Organisational psychology's greatest hits and misses: A personal view. In A. Glendon, B. M. Thompson, & B. Myers (Eds.), *Advances in organisational psychology* (pp. 11-31). Bowen Hills, AUS: Australian Academic Press.
- Nietzsche, F. W. (1888/2004). *Twilight of the idols*. Mineola, USA: Dover.
- Nisbett, R. E., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliff, USA: Prentice-Hall.
- Oakes, P. J. (1987). The salience of social categories. In J. C. Turner, M. A. Hogg, P. Oakes, S. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the social group: A self-categorization theory* (pp. 117-141). Oxford, UK: Blackwell.
- Oakes, P. J. (1996). The categorization process: Cognition and the group in the social psychology of stereotyping. In W. P. Robinson (Ed.), *Social groups and identities: Developing the legacy of Henri Tajfel* (pp. 95-120). Oxford, UK: Butterworth-Heinemann.
- Oakes, P. J. (2001). The root of all evil in intergroup relations? Unearthing the categorization process. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 3-21). Malden, USA: Blackwell.
- Oakes, P. J., Haslam, S. A., & Reynolds, K. J. (1999). Social categorization and social context: Is stereotype change a matter of information or of meaning. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 55-79). Oxford, UK: Blackwell.

- Oakes, P. J., Haslam, S. A., & Turner, J. C. (1994). *Stereotyping and social reality*. Oxford, UK: Blackwell.
- Oakes, P. J., & Reynolds, K. J. (1997). Asking the accuracy question: Is measurement the answer? In R. Spears, P. J. Oakes, N. Ellemers, & A. S. Haslam (Eds.), *The social psychology of stereotyping and group life* (pp. 51-71). Oxford, UK: Blackwell.
- Oakes, P. J., & Turner, J. C. (1980). Social categorization and intergroup behaviour: Does minimal intergroup discrimination make social identity more positive? *European Journal of Social Psychology*, *10*(3), 295-301.
- Oakes, P. J., & Turner, J. C. (1986a). Authors' rejoinder to Jahoda and Tetlock. *British Journal of Social Psychology*, *25*, 257-258.
- Oakes, P. J., & Turner, J. C. (1986b). Distinctiveness and the salience of social category memberships: Is there an automatic perceptual bias towards novelty? *European Journal of Social Psychology*, *16*(4), 325-344.
- Oakes, P. J., & Turner, J. C. (1990). Is limited information processing capacity the cause of social stereotyping? *European Review of Social Psychology*, *1*(1), 111-135.
- Oakes, P. J., Turner, J. C., & Haslam, S. A. (1991). Perceiving people as group members: The role of fit in the salience of social categorizations. *British Journal of Social Psychology*, *30*, 125-144.
- Ogilvie, D. M., & Ashmore, R. D. (1991). Self-with-other representation as a unit of analysis in self-concept research. In R. C. Curtis (Ed.), *The relational self: Theoretical convergences in psychoanalysis and social psychology* (pp. 282-313). New York, USA: Guilford Press.

- Onorato, R. S., & Turner, J. C. (2004). Fluidity in the self-concept: the shift from personal to social identity. *European Journal of Social Psychology, 34*(3), 257-278.
- Operario, D., & Fiske, S. T. (1999). Integrating social identity and social cognition: A framework for bridging diverse perspectives. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 26-54). Oxford, UK: Blackwell.
- Operario, D., & Fiske, S. T. (2001). Stereotypes: Content, structures, processes, and context. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (Vol. 1, pp. 22-44). Malden, USA: Blackwell.
- Ottati, V., & Lee, Y. (1995). Accuracy: A neglected component of stereotype research. In Y. Lee, L. J. Jussim, & C. R. McCauley (Eds.), *Stereotype accuracy: Toward appreciating group differences* (pp. 29-59). Washington, USA: American Psychological Association.
- Otten, S., & Epstude, K. (2006). Overlapping mental representations of self, ingroup, and outgroup: Unraveling self-stereotyping and self-anchoring. *Personality and Social Psychology Bulletin, 32*(7), 957-969.
- Paolini, S., Harwood, J., & Rubin, M. (2010). Negative intergroup contact makes group memberships salient: Explaining why intergroup conflict endures. *Personality and Social Psychology Bulletin, 36*(12), 1723-1738.
- Parvin, L. A., & Lewis, M. (1978). *Perspectives in interactional psychology*. New York, USA: Plenum Press.
- Pashler, H., & Wagenmakers, E. (2012). Editors' introduction to the special section on replicability in psychological science a crisis of confidence? *Perspectives on Psychological Science, 7*(6), 528-530.

- Pendry, L. F., & Macrae, C. N. (1996). What the disinterested perceiver overlooks: Goal-directed social categorization. *Personality and Social Psychology Bulletin*, 22(3), 249-256.
- Pickett, C. L., & Leonardelli, G. J. (2006). Using collective identities for assimilation and differentiation. In T. Postmes, & J. Jetten (Eds.), *Individuality and the group: Advances in social identity* (pp. 56-73). London, UK: SAGE
- Pierro, A., & Kruglanski, A. W. (2008). "Seizing and freezing" on a significant-person schema: Need for closure and the transference effect in social judgment. *Personality and Social Psychology Bulletin*, 34(11), 1492-1503.
- Pierro, A., Orehek, E., & Kruglanski, A. W. (2009). Let there be no mistake! On assessment mode and the transference effect in social perception. *Journal of Experimental Social Psychology*, 45(4), 879-883.
- Platow, M. J., Hunter, J. A., Haslam, S. A., & Reicher, S. (2015). Reflections on Muzafer Sherif's legacy in social identity and self-categorization theories. In A. Dost-Gözkan & D. Sönmez-Keith (Eds.), *Norms, groups, conflict, and social change: Rediscovering Muzafer Sherif's psychology* (pp. 275-305). London, UK: Transaction.
- Postmes, T., & Branscombe, N. R. (2010). Sources of social identity. In T. Postmes & N. R. Branscombe (Eds.), *Rediscovering social identity: Core sources* (pp. 1-12). New York, USA: Psychology Press.
- Przybylinski, E., & Andersen, S. M. (2011, May). *Regulating the phenomenon of transference: Implementation intentions disrupt the effect*. Paper presented at the Association for Psychological Science Conference, Washington, USA.

- Przybylinski, E., & Andersen, S. M. (2012). Making interpersonal meaning: Significant others in mind in transference. *Social and Personality Psychology Compass*, 6(10), 746-759.
- Qualtrics. (2009). *Qualtrics Research Suite* [Computer software]. Provo, USA.
Retrieved from <http://www.qualtrics.com>
- Ratcliff, R. (1993). Methods for dealing with reaction time outliers. *Psychological Bulletin*, 114(3), 510-532.
- Reicher, S., & Haslam, A. S. (2015). *John Turner Obituary*. Retrieved from <http://www.theguardian.com/education/2011/sep/06/john-turner-obituary>
- Reynolds, K. J., Jones, B. M., O'Brien, K., & Subasic, E. (2013). Theories of socio-political change and the dynamics of sub-Group versus superordinate interests. *European Psychologist*, 18(4), 235-244.
- Reynolds, K. J., & Oakes, P. J. (1999). Understanding the impression formation process: A self-categorization theory perspective. In T. Sugiman, J. Karasawa, J. Lui, & C. Ward (Eds.), *Progress in Asian social psychology* (Vol. 2, pp. 213-235). Seoul, South Korea: Kyoyook-Kwahak-Sa.
- Reynolds, K. J., & Turner, J. C. (2006). Individuality and the prejudiced personality. *European Review of Social Psychology*, 17(1), 233-270.
- Reynolds, K. J., & Turner, J. C. (2012). Self-categorization theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories in social psychology* (pp. 399-418). London, UK: SAGE.
- Reynolds, K. J., Turner, J. C., Branscombe, N. R., Mavor, K. I., Bizumic, B., & Subasic, E. (2010). Interactionism in personality and social psychology: An

- integrated approach to understanding the mind and behaviour. *European Journal of Personality*, 24(5), 458-482.
- Reynolds, K. J., Turner, J. C., & Haslam, S. A. (2000). When are we better than them and they worse than us? A closer look at social discrimination in positive and negative domains. *Journal of Personality and Social Psychology*, 78(1), 64-80.
- Rink, F., & Ellemers, N. (2007). Diversity as a basis for shared organizational identity: The norm congruity principle. *British Journal of Management*, 18(s1), S17-S27.
- Rosch, E. (1978). Principles of categorization. In E. Rosch & B. B. Lloyd (Eds.), *Cognition and Categorization* (pp. 189-206). Hillsdale, USA: Erlbaum.
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86(3), 638-641.
- Rubin, M., & Hewstone, M. (2004). Social identity, system justification, and social dominance: Commentary on Reicher, Jost et al., and Sidanius et al. *Political Psychology*, 25(6), 823-844.
- Ryan, C. S. (1995). Motivations and the perceiver's group membership: Consequences for stereotype accuracy. In Y. Lee, L. J. Jussim, & C. R. McCauley (Eds.), *Stereotype accuracy: Toward appreciating group differences* (pp. 189-214). Washington, USA: American Psychological Association.
- Safran, J., & Segal, Z. V. (1990). *Interpersonal process in cognitive therapy*. New York, USA: Basic Books.
- Sarbin, T. R., Taft, R., & Bailey, D. E. (1960). *Clinical inference and cognitive theory*. New York, USA: Holt, Rinehart and Winston.

- Saribay, S. A., & Andersen, S. M. (2007). Relational to collective: Significant-other representations, ethnic categories, and intergroup perceptions. *Personality and Social Psychology Bulletin*, 33(12), 1714-1726.
- Secord, P. F., & Jourard, S. M. (1956). Mother-concepts and judgments of young women's faces. *The Journal of Abnormal and Social Psychology*, 52(2), 246-250.
- Sedikides, C., & Gaertner, L. (2001). The social self: The quest for identity and the motivational primacy of the individual self. In J. P. Forgas, K. D. Williams, & L. Wheeler (Eds.), *The social mind: Cognitive and motivational aspects of interpersonal behavior* (pp. 115-138). Cambridge, UK: Cambridge University Press.
- Sherif, M., & Hovland, C. I. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change*. London, UK: Yale University Press.
- Sidanius, J., Devereux, E., & Pratto, F. (1992). A comparison of symbolic racism theory and social dominance theory as explanations for racial policy attitudes. *The Journal of social psychology*, 132(3), 377-395.
- Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological Science*, 22(11), 1359-1366.
- Skorich, D. P., & Mavor, K. I. (2013). Cognitive load privileges memory-based over data-driven processing, not group-level over person-level processing. *British Journal of Social Psychology*, 52, 469-488.
- Smith, E. R. (1996). What do connectionism and social psychology offer each other? *Journal of Personality and Social Psychology*, 70(5), 893-912.

- Smith, E. R. (1999). Affective and cognitive implications of a group becoming part of the self: New models of prejudice and of the self-concept. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 183-196). Oxford, UK: Blackwell.
- Smith, E. R. (2006). Multiply categorizable social objects: Representational models and some potential determinants of category use. In R. J. Crisp & M. Hewstone (Eds.), *Multiple social categorization: Processes, models, and applications* (pp. 50-62). New York, USA: Psychology Press.
- Smith, E. R., & DeCoster, J. (1998). Knowledge acquisition, accessibility, and use in person perception and stereotyping: Simulation with a recurrent connectionist network. *Journal of Personality and Social Psychology*, 74(1), 21-35.
- Smith, E. R., & Henry, S. (1996). An in-group becomes part of the self: Response time evidence. *Personality and Social Psychology Bulletin*, 22(6), 635-642.
- Smith, E. R., & Zarate, M. A. (1990). Exemplar and prototype use in social categorization. *Social Cognition*, 8(3), 243-262.
- Smith, E. R., & Zarate, M. A. (1992). Exemplar-based model of social judgment. *Psychological Review*, 99(1), 2-21.
- Smyth, L., Mavor, K. I., Platow, M. J., Grace, D. M., & Reynolds, K. J. (2013). Discipline social identification, study norms and learning approach in university students. *Educational Psychology*, 35(1), 53-72.
- Spears, R. (1994). Why 'depopulation' should not (necessarily) be taken personally: A commentary on 'repopulating the depopulated pages of social psychology'. *Theory and Psychology*, 4(3), 337-344.

- Spears, R., Ellemers, N., Doosje, B., & Branscombe, N. (2006). The individual within the group: Respect! In T. Postmes, & J. Jetten (Eds.), *Individuality and the group: Advances in social identity* (pp. 175-195). London, UK: SAGE.
- Spears, R., & Haslam, S. A. (1997). Stereotyping and the burden of cognitive load. In R. Spears, P. Oakes, N. Ellemers, & A. S. Haslam (Eds.), *The social psychology of stereotyping and group life* (pp. 171-207). Oxford, UK: Blackwell.
- Spears, R., Oakes, P. J., Ellemers, N., & Haslam, S. A. (1997). Introduction: The social psychology of stereotyping and group life. In R. Spears, P. J. Oakes, N. Ellemers, & S. A. Haslam (Eds.), *The social psychology of stereotyping and group life* (Vol. 18, pp. 1-19). Oxford, UK: Blackwell.
- Spencer, S. J., Fein, S., Wolfe, C. T., Fong, C., & Duinn, M. A. (1998). Automatic activation of stereotypes: The role of self-image threat. *Personality and Social Psychology Bulletin*, 24(11), 1139-1152.
- Staats, A. W. (1983). *Psychology's crisis of disunity: Philosophy and method for a unified science*. New York, USA: Praeger.
- Staats, A. W. (1991). Unified positivism and unification psychology: Fad or new field? *American Psychologist*, 46(9), 899-912.
- Staats, A. W. (1999). Unifying psychology requires new infrastructure, theory, method, and a research agenda. *Review of General Psychology*, 3(1), 3-13.
- Stolorow, R. D. (1991). The intersubjective context of intrapsychic experience, with special reference to therapeutic impasses. In R. C. Curtis (Ed.), *The relational self: Theoretical convergences in psychoanalysis and social psychology* (pp. 17-33). New York, USA: Guilford Press.
- Stone, L. (1961). *The psychoanalytic situation: An Examination of its development and essential nature*. New York, USA: International Universities Press.

- Struch, N., & Schwartz, S. H. (1989). Intergroup aggression: Its predictors and distinctness from in-group bias. *Journal of Personality and Social Psychology*, 56(3), 364-373.
- Sullivan, H. S. (1940). *Conceptions of modern psychiatry*. New York, USA: Norton.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York, USA: Norton and Company.
- Tajfel, H. (1957). Value and the perceptual judgment of magnitude. *Psychological Review*, 64(3), 192-204.
- Tajfel, H. (1959). Quantitative judgement in social perception. *British Journal of Psychology*, 50(1), 16-29.
- Tajfel, H. (1969). Cognitive aspects of prejudice. *Journal of Biosocial Science*, 1(S1), 173-191.
- Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information*, 13(2), 65-93.
- Tajfel, H. (1978a). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. London, UK: Academic Press.
- Tajfel, H. (1978b). Intergroup behaviour: II group perspectives. In H. Tajfel & C. Fraser (Eds.), *Introducing social psychology* (pp. 423- 446). Harmondsworth, UK: Penguin.
- Tajfel, H. (1978c). Social categorization, social identity, and social comparison. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations*. (pp. 61-76). London, UK: Academic Press.
- Tajfel, H. (1978d). The structure of our views about society. In H. Tajfel & C. Fraser (Eds.), *Introducing social psychology* (pp. 302-321). Harmondsworth, UK: Penguin.

- Tajfel, H. (1981). Social stereotypes and social groups. In J. C. Turner & H. Giles (Eds.), *Intergroup behaviour* (pp. 144-167). Oxford, UK: Blackwell.
- Tajfel, H., & Billig, M. (1974). Familiarity and categorization in intergroup behavior. *Journal of Experimental Social Psychology, 10*(2), 159-170.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 7-24). Chicago, USA: Nelson-Hall.
- Tajfel, H., & Wilkes, A. L. (1963). Classification and quantitative judgement. *British Journal of Psychology, 54*(2), 101-114.
- Taylor, S. E., Fiske, S. T., Etcoff, N. L., & Ruderman, A. J. (1978). Categorical and contextual bases of person memory and stereotyping. *Journal of Personality and Social Psychology, 36*(7), 778-793.
- Terry, D. J., Carey, C. J., & Callan, V. J. (2001). Employee adjustment to an organizational merger: An intergroup perspective. *Personality and Social Psychology Bulletin, 27*(3), 267-280.
- Terry, D. J., & O'Brien, A. T. (2001). Status, legitimacy, and ingroup bias in the context of an organizational merger. *Group Processes and Intergroup Relations, 4*(3), 271-289.
- Triandis, H. C., & Trafimow, D. (2001). Culture and its implications for intergroup behavior. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 367-385). Malden, USA: Blackwell.
- Turner, J. C. (1981). Some considerations in generalizing experimental social psychology. In G. M. Stephenson & J. H. Davis (Eds.), *Progress in applied social psychology* (Vol. 1, pp. 3-34). Chichester, UK: John Wiley and Sons.

- Turner, J. C. (1982). Toward a cognitive definition of the group. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 15–40). Cambridge, UK: Cambridge University Press.
- Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E. J. Lawler (Ed.), *Advances in group processes: Theory and research* (Vol. 2, pp. 77-122). Greenwich, USA: JAI Press.
- Turner, J. C. (1987a). Preface. In J. C. Turner, M. A. Hogg, P. Oakes, S. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the social group: A self-categorization theory* (pp. VII-X). Oxford, UK: Blackwell.
- Turner, J. C. (1987b). A self-categorization theory. In J. C. Turner, M. A. Hogg, P. Oakes, S. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the social group: A self-categorization theory* (pp. 42-67). Oxford, UK: Blackwell.
- Turner, J. C. (1988). Foreward. In M. A. Hogg & D. Abrams (Eds.), *Social identifications: A social psychology of intergroup relations and group processes* (pp. X-XII). London, UK: Routledge.
- Turner, J. C. (1991). *Social influence*. Buckingham, UK: Open Psychology Press.
- Turner, J. C. (1997). *Social identity and the concept of prejudice*. Paper presented at the ANU Division of Psychology Seminar Program, Canberra, AUS.
- Turner, J. C. (1999a). *The social identity perspective: Getting it right and getting it wrong*. Paper presented at the Jena.
- Turner, J. C. (1999b). Some current issues in research on social identity and self-categorization theories. In N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social identity: Context, commitment, content* (pp. 6-34). Oxford, UK: Blackwell.

- Turner, J. C. (2001a, October). *The idea of prejudice in social psychology and the alternative*. Paper presented at the The Second Freilich Foundation Eminent Lecturer Series, Canberra, AUS.
- Turner, J. C. (2001b, October). *The prejudiced personality and social change*. Paper presented at the The Second Freilich Foundation Eminent Lecturer Series.
- Turner, J. C. (2001c, October). *Prejudice in a social vacuum*. Paper presented at the The Second Freilich Foundation Eminent Lecturer Series.
- Turner, J. C. (2005). Explaining the nature of power: A three-process theory. *European Journal of Social Psychology*, 35(1), 1-22.
- Turner, J. C. (2006). Tyranny, freedom and social structure: Escaping our theoretical prisons. *British Journal of Social Psychology*, 45(1), 41-46.
- Turner, J. C., & Bourhis, R. Y. (1996). Social identity, interdependence and the social group: A reply to Rabbie et al. In W. P. Robinson (Ed.), *Social groups and identities: Developing the legacy of Henri Tajfel* (pp. 25-63). Oxford, UK: Butterworth-Heinemann.
- Turner, J. C., M. A. Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.
- Turner, J. C., & Oakes, P. J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. *British Journal of Social Psychology*, 25(3), 237-252.
- Turner, J. C., & Oakes, P. J. (1997). The socially structured mind. In C. McGarty & A. S. Haslam (Eds.), *The message of social psychology* (pp. 355-373). Cambridge, USA: Blackwell.

- Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin*, 20, 454-463.
- Turner, J. C., & Onorato, R. S. (1999). Social identity, personality, and the self-concept: A self-categorization perspective. In T. R. Tyler, R. M. Kramer, & O. P. John (Eds.), *The psychology of the social self* (pp. 11-46). Mahwah, USA: Lawrence Erlbaum Associates.
- Turner, J. C., & Reynolds, K. J. (2001). The social identity perspective in intergroup relations: Theories, themes, and controversies. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 133-152). Malden, USA: Blackwell.
- Turner, J. C., & Reynolds, K. J. (2003). Why social dominance theory has been falsified. *British Journal of Social Psychology*, 42(2), 199-206.
- Turner, J. C., & Reynolds, K. J. (2010). The story of social identity. In T. Postmes & N. R. Branscombe (Eds.), *Rediscovering social identity: Core sources* (pp. 13-32). New York, USA: Psychology Press.
- Turner, J. C., Reynolds, K. J., Haslam, S. A., & Veenstra, K. E. (2006). Reconceptualizing personality: Producing individuality by defining the personal self. In T. Postmes, & J. Jetten (Eds.), *Individuality and the group: Advances in social identity* (pp. 11-36). London, UK: SAGE.
- Turner, J. C., Reynolds, K. J., & Subasic, E. (2008). Identity confers power: The new view of leadership in social psychology. In P. Hart & J. Uhr (Eds.), *Public leadership* (pp. 57-72). Canberra, AUS: ANU Press.

- Van Rooy, D., Van Overwalle, F., Vanhoomissen, T., Labiouse, C., & French, R. (2003). A recurrent connectionist model of group biases. *Psychological Review*, *110*(3), 536-563.
- Van Rooy, D., Vanhoomissen, T., & Van Overwalle, F. (2013). Illusory correlation, group size and memory. *Journal of Experimental Social Psychology*, *49*(6), 1159-1167.
- Veelen, R., Otten, S., & Hansen, N. (2013). Social identification when an in-group identity is unclear: The role of self-anchoring and self-stereotyping. *British Journal of Social Psychology*, *52*(3), 543-562.
- Wallin, D. J. (2007). *Attachment in psychotherapy*. New York, USA: Guilford Press.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063-1070.
- Weber, M. (1917/2004). Science as a vocation. In D. Owen & T. B. Strong (Eds.), *The vocation lectures* (pp. 1-31). Indianapolis, USA: Hackett.
- Weiss, J. (1986a). The patient's unconscious work. In J. Weiss, H. Sampson, & M. Z. P. R. Group (Eds.), *The psychoanalytic process: Theory, clinical observation, and empirical research* (pp. 101-116). New York, USA: Guilford Press.
- Weiss, J. (1986b). Unconscious guilt. In J. Weiss, H. Sampson, & M. Z. P. R. Group (Eds.), *The psychoanalytic process: Theory, clinical observation, and empirical research* (pp. 43-67). New York, USA: Guilford Press.
- Westen, D. (1991). Cultural, emotional, and unconscious aspects of self. In R. C. Curtis (Ed.), *The relational self: Theoretical convergences in psychoanalysis and social psychology* (pp. 181-210). New York, USA: Guilford Press.

Wickens, T. D. (2001). *Elementary signal detection theory*. New York, USA: Oxford University Press.

Wilder, D. A., & Thompson, J. E. (1988). Assimilation and contrast effects in the judgements of groups. *Journal of Personality and Social Psychology*, 54(1), 62-73.

Wisniewski, E. J., Clancy, E. J., & Tillman, R. N. (2005). On different types of categories. In W. Ahn, R. L. Goldstone, B. C. Love, A. B. Markman, & P. Wolff (Eds.), *Categorization inside and outside the lab: Essays in honor of Douglas L. Medin* (pp. 103-126). Washington, USA: American Psychological Association.