The Century of Theoretical Psychology?
Rene van Hezewijk
Theory Psychology 2000; 10; 99
DOI: 10.1177/0959354300010001604

The online version of this article can be found at:
http://tap.sagepub.com/cgi/content/abstract/10/1/99
The Century of Theoretical Psychology?

René van Hezewijk
Utrecht University

ABSTRACT. Has psychology been able to fulfill William James’ hope that the 20th century was going to be the age of psychology? I argue that James would have been amazed to find that psychological knowledge has grown so much, examples of which are given. However, we know now much more we do not know than James would have suspected. Next I discuss why so many debates in psychology are threatening its coherence. Two kinds of debate are distinguished, one of which is characterized as tending to the infinite. I conclude with suggestions about theoretical psychology’s proper role in psychology in the new century.

KEY WORDS: controversies, gaps, theoretical psychology

More than 100 years ago William James declared psychology to be ‘no science [but] only the hope of a science’ (James, 1892, p. 468). He saw that many problems remained to be solved. However, there were reasons to be optimistic about their solvability. They no longer appeared as puzzles or mysteries, and he suggested the 20th century would be the century of psychology. Was he right?

Theoretically James was ahead of his times. He knew that many methodical and technical difficulties had to be overcome. In this essay I ask myself where we stand more than a century later. Can we be as optimistic about the new century as William James was about his? Or should we be more modest about what has been achieved?

From the perspective of James we have done amazingly well. Knowledge about mental life and individual behavior has grown, especially in the last 25 years. However, from the perspective of the psychologist at the turn of the 21st century we can see that there is more to be done and to be understood than William James ever dreamed would be necessary. In other words, although we are further removed from the beginning than William James, the finish is even more removed from us than James thought it was over a century ago. It seems that we live in an ever-expanding domain of possible psychological knowledge. Therefore we need theory.
Reasons to be Cheerful

It is safe to say that James would have been baffled by some of the insights we now have about human behavior and mental life. To mention some insights, theories, models or hypotheses that would have amazed him:

- the sophisticated aspects of conditioning in behavior, cognition and emotions;
- the computational powers of neural (parallel distributed) networks as such (some of which James foresaw in 1890);
- the complex interactions between domain-specific cognitions;
- the structure of language and the features of its most important elements: phonology, morphology, syntax, semantics, discourse, in speech and writing, in listening and reading;
- the role of categorization in cognition: categories as the result of intuitive theories of the world, rather than the basis of it;
- the role of prototypes in categorization;
- conscious and non-conscious (implicit, automatic, involuntary, capacity-free) processing in cognition, emotions and behavior, e.g. priming, masking, Stroop effects, etc.;
- mechanisms, anatomy and physiology of vision, hearing, smell, touch, taste;
- unique data from cognitive neuropsychology that represent important problems for general explanation and help us to understand more about the computational aspects of consciousness;
- insights in both the social aspects and the biological mechanisms of emotions and moods.

Reasons to be Pensive

However, not all’s as well as it looks. Psychology is a science with a potentially enormous range, from biology to sociology, from linguistics to cultural anthropology, from pharmacy to economics, and mingles in bastard sciences like neuroscience, cognitive science, health science, and so on. Some of these scientific domains can be considered special sciences based on psychological insights or assumptions claiming to be a fundamental science on their own. These specialties as well as miscellanies strongly contribute to the centrifugal forces that psychology is subject to. So one often wonders what keeps psychology together? What will keep it together?

Whatever it is, I would like to baptize the factor that is supposed to keep psychology together as the unifying factor.Implicitly psychologists think there is one (or more) unifying factor(s). Although we have never been able to exactly locate or articulate it, this still mysterious factor must be already
present. It must be, if there is intuitive agreement as to what belongs to the domain of psychology.

One candidate is psychology's problem domain. Its problem domain can be characterized, roughly, as 'the science of the what, the how and the why of mental life and behavior'. However, that is a rather unspecific characterization. First, there are more sciences that must be included. Second, mental life comprises perception, cognition, emotions, will, consciousness, and so on. Each of these functions has its own approaches and problems. And 'mental life' might be too vague a term to be used outside common sense and the mass media.

Another candidate might be that after all there is a 'unified approach': a central theory or a set of shared assumptions. That is, not the problems but the suggested solutions define the domain of psychology. Do we have such a unified or unifying approach?

A third candidate might be the methods we use. Perhaps this is not a very sophisticated unifying factor, but it might serve, according to some. Most psychologists have learned to mention 'the experimental method'. However, first, this is not a distinguishing feature of psychology: many sciences use and will use experimental methods to test ideas, because it is the most rigorous one available. Second, it can be—and often is—questioned whether it is all to the good of psychology to adopt experimental methods. Thus, the suggestion is that we should look to a deeper level to answer the question what procedures (for deciding about what theories it is rational to work on) we can use to find answers to questions about behavior and mental life.

**Gaps and Controversies**

Psychology is full of debate and non-violent conflict. Upon closer examination one finds differences between the arguments and the discussions. One could distinguish two types of conflicts.

**Gaps**

In one type of conflict the discussions seem endless. And if ever they end it is because they have evaporated instead of having been rationally decided upon. The arguments are about fundamentalist matters, they revolve about tacit presuppositions, about abstract assumptions and about definitions. Often they involve fundamental disagreements about the methods or procedures that can bring the argument to a rational decision. The questions at stake are either p-questions (p for puzzlement) or open-ended-why-questions, that is, questions formulated in a sentence beginning with 'why' that do not have either 'yes' or 'no' for an answer (Bromberger, 1992a, 1992b), or that do not have a choice between two, three or a limited number of answers (Agassi, 1975; Hattiangadi, 1978, 1979).
Let us call these differences in discussions gaps. The debate about mental imagery at the beginning of the 20th century seems a good example of a gap. It was about the presuppositions about (a) mental (and conscious) processing, (b) the acceptable procedures to decide between suggested hypotheses (i.e. introspection) and (c) the what-question: What is thinking? The intelligence debate still is, or at least is conducted as if it is, a gap. The 'innateness debate' is another gap, in the present definition.

Controversies

Other debates do not appear endless. They move toward closure. They may be abstract and fundamental but they are not fundamentalistic. There seems no need to go to the deepest of the common ground for the debate. Nor do they revolve around tacit presuppositions. The basic assumptions are clear and accepted. The procedures required to come to a rational decision are clear. The questions are not open-ended but involve 'yes' or 'no', or a multiple choice. Let us call them controversies.

The imagery debate has only recently been reformulated, first, from the question 'What is thinking?' to the question 'Do we have propositional ideas apart from images as ideas?' These are the terms in which the debate was already formulated at the beginning of the 20th century; however, the recent development is that this wording is deduced from why-questions, seeking answers to the question 'Why do we have images when thinking is the symbolic processing of propositions?' And, second, it has been promoted from gap to controversy due to the recent availability of neuroimaging methods. So now it is a controversy, not a gap, insofar as it is a debate.

The Role of Theory

The role of theory in gaps is different from the role in controversies. How 'theory' is defined depends on this role. In gaps matters of definition dominate theoretical discussions. The majority of these involve claims about existential and all-and-some statements. That is, they tend to be about claims to knowledge that can be verified but cannot be falsified (uncircumscribed existential statements, e.g. 'There is an innate mental depiction system'). Or that can be neither falsified nor verified (all-and-some statements like 'For every mental image there is some propositional matrix producing it'). Thus, these are metaphysical (or non-empirical) claims.

Empirical discussions are about falsifiable statements. These are either falsifiable and verifiable basic statements (or circumscribed existential statements like 'There is now a participant in this experiment reporting a mental image'). Or these are universal statements (falsifiable, not verifiable). This is not to say that no metaphysical statements are involved. Indeed 'theory' in
controversies is about the, often implicit, metaphysical implications of empirical and universal statements.  

Theory and Psychology

Theoretical psychology is often interpreted as theory about psychology. That is, a stance is taken in which claims are discussed on the level of gaps. More precisely, psychologists debate statements of a metaphysical nature, or even debate as if discussion can be undertaken rationally on that level ignoring the basic statements (i.e. the empirical data) available or wanted.

I claim that another interpretation of theoretical psychology is more fruitful. This is the kind of theory (re)construction in which the metaphysical presuppositions of (or ‘in’) empirical psychology are articulated and consequently discussed. I suggest, and discuss elsewhere (Van Hezewijk, 1996, 1999), that theoretical psychology embrace the rational debate about metaphysical presuppositions. More precisely it guides the discussion about the consistency between different empirical claims in psychology, the coherence of theories and sets of empirical claims in psychology, and the convergence of theoretical and empirical claims in psychology with those in other sciences (biology, linguistics, anthropology, etc.).

Theoretical Psychology in the New Century

Keeping in mind, on the one hand, the distinction between gaps and controversies, and, on the other, the number of words allowed for this commentary, one could only briefly express one’s hopes for the role of theory in the science of psychology. I will focus on the hoped for developments in psychology and its relation to problems, theories and procedures.

What Problems are Fruitful to Work on in Psychology?

Theoretical discussion should focus on why-questions. What-is-questions (e.g. What is consciousness?) are not fruitful. They have no ‘yes-or-no’ or multiple-choice answers. If we hope for a firm, substantial and relevant relation between theory and (empirical) psychology, theoretical psychologists should be involved with problems. They should help to analyze broad questions from multiple audiences in order to deduce the focused questions implied by them that can be answered with a yes or a no (or a rational, if not empirical, choice between a limited number of possible answers).

What Theories are Fruitful to Work on?

Theoretical psychology has a future if that is integrated in psychology, that is, if it helps to (re)construct the non-empirical (metaphysical) claims
implied by empirical hypotheses. It is necessary to show that the apparently diverse empirical claims have common metaphysical cores. They thereby imply a limited number of ‘possible worlds’ in which it is clearer why human beings do what they do and experience what they experience. It also becomes clear how they relate to the claims of neighboring scientific disciplines, that these claims are consistent with other empirical claims and in what way they cohere (read: in what way they unify).

**What Procedures are Fruitful for Rational Decision about What to Work on?**

It must have become clear that I hope that, rather than losing itself in discussions of how the world *should* be, theoretical psychology ought to concern itself with how it *is*, in the deepest sense of the word. Theoretical psychologists have often presented themselves as the moral or phenomenological *judges* of the results of empirical research of their colleagues. In my view theoretical psychologists do not have the task of deciding what the best of all worlds should be, nor should they use their own feelings as the benchmark for truth. Theoretical psychology can help to find objective procedures for deciding between knowledge claims of both an empirical and non-empirical (metaphysical) nature. It could also help to decide about theories and research programs on the basis of more than experimental criteria. The criteria should be objective, that is, independent of the person(s) who make(s) the decision.

The interesting thing about gaps is that they still seem to depend on individual or group judgements about the truth of claims to knowledge, whereas controversies appear to be less dependent on individuals and more on objective methods of deciding about truthfulness and falsehood. Finding ways to turn from subjectivity to objectivity in this sense is one of the tasks of theoretical psychology.

In the 20th century psychology showed itself to be more than a hope for a science. In a number of fields progress has been made. However, there is a constant threat that psychology will disintegrate into either subdisciplines or a bastard science. It is the task of psychology to explain why human beings behave and experience as they do. Theoretical psychology has the means to rationally reconstruct what that implies, how psychology’s knowledge claims cohere, whether its theories are consistent and how they converge with other sciences. In the new century theoretical psychology can use these means in its task to help prevent the disintegration of psychology due to the ever-expanding quantity of knowledge, *and consequentially* the ever-expanding lacunae in our knowledge. More and more theory will be necessary. Therefore there is hope for theoretical psychology.
Notes

1. It is my conviction that (a) we will never be certain about truth, and (b) it is possible to know what is false. Therefore any claim to knowledge is provisional, and claiming we know something is claiming we now know more than—say—a century ago, or than another claim to know. ‘Insights’ should be read not as ‘insights proven right’, but as ‘insights that have not yet been proven wrong’.

2. I do not claim the following list to be complete. There may be other positive developments.

3. More details about this interpretation of ‘metaphysics’ in psychology can be found in Van Hezewijk (1987). A more general approach is to be found in Watkins (1957, 1975, 1984).

4. ‘All wolves prefer lambs to deer.’

5. The universal statement in note 4 implies the existence of wolves, lambs, deer and preferences.

References

Bromberger, S. (1992b). What we don’t know when we don’t know why. In S. Bromberger (Ed.), On what we know we don’t know (pp. 145–169). Chicago, IL: University of Chicago Press.

RENÉ VAN HEZEWIJK (Ph.D.) is Associate Professor at the Department of Psychonomics of Utrecht University. He is a member of the Research Institute Psychology & Health, and of the Netherlands Center for Theoretical Psychology. He is interested in theory comparison in the fields of consciousness, categorization and evolutionary psychology. He teaches General and Theoretical Psychology, as well as History of Psychology. He
is the Editor of the leading Dutch journal of psychology *Nederlands Tijdschrift voor de Psychologie*, a member of the Editorial Board of *Theory & Psychology*, and former Secretary of the International Society for Theoretical Psychology. ADDRESS: Psychological Laboratory, Department of Psychonomics, Utrecht University, Heidelbergraan 2, 3584 CS Utrecht, The Netherlands. [email r.vanhezewijk@fss.uu.nl]